

Vol. LXXV—No. 11

Hamilton, Illinois, November, 1935

Monthly, \$1.00 a Year

# The Cellulo Method of Honey Filtering

By L. E. Milkey,  
Ohio.

ANYONE attending the meetings during National Honey Week at Detroit could not help but note the concern expressed there for the need of better honey processing methods to bring about uniformity, attractiveness and stability in packaged honey. If such honey is to expand in sales as it is entitled to in competition with other table syrups, it is felt that some more effort must be made to put on the market a uniform, clear honey that will also stay that way on the dealers' shelves until bought and consumed.

Thus far the filtering and processing of liquid honey after the general method evolved by Messrs. Paine and Lothrop of the U. S. Bureau of Chemistry, has proved the most satisfactory for this purpose and commercial installations handling a total of over five thousand pounds per day are now in daily operation. Certain simplifications have been made by The Cellulo Company of Sandusky, Ohio so that the process is no longer complicated or variable in the results

produced, or impractical even for the small producer.

This illustration shows the approximate layout for a small installation to handle five hundred-pound batches of honey, wherein the actual time of filtering is about one hour. The process can be described as follows: the unfiltered honey is emptied or pumped into the mixing tank where the necessary amount of filteraid—about one-half of one per cent depending upon the type of honey—is added and thoroughly mixed in by the slowly operated agitator in the mixing tank. This agitator may be belt driven or direct motor connected.

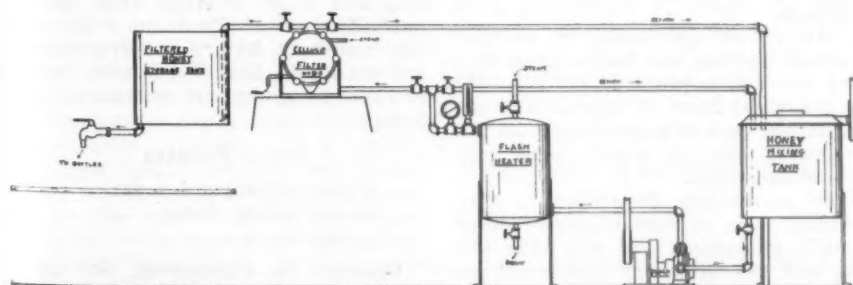
From the mixing tank the honey flows through a special power driven honey pump with pressure regulation and is thus forced through the Flash Heater shown, where its temperature is raised to 160 degrees F. in a matter of seconds. The Flash Heater is supplied with low pressure steam for heating which however, does not come into direct contact with the honey. From the Flash Heater the honey is forced directly through the

Cellulo Filter and then to the storage tank from which it is bottled while still warm enough to flow easily.

The Filter is a multiple-disc, steam-jacketed unit fitted with renewable filter discs so as to accomplish a dual filtration. The filteraid previously mixed with the honey, builds up into a cake within the filter and against the filter discs. The function of the filteraid in this method is to bring about a rough pre-filtering while the special filter discs themselves give the honey a final clarity and polish and insure that all crystal particles however small, as well as all pollen are removed. Once the honey has passed through this dual filtration the desired clarity and brightness is obtained uniformly throughout the filtering cycle and no precoating operation is necessary. Filtering pressures range from ten to thirty-five pounds.

Each individual filter disc will handle about one hundred fifty pounds of honey before it needs to be renewed. A small filter as herein described is fitted with six discs and the cost of the filteraid, filter discs, and small loss of honey in the discarded filteraid will run approximately 15c per hundred pounds of honey filtered. The operation of opening the filter for replacing filter discs or cleaning is a simple one.

The resulting filtered honey is attractively clear, free from minute air bubbles, and is without any change in taste and flavor. The color is somewhat lighter because the foreign matter and solid particles causing the original turbidity have all been removed, and these always have a darkening effect on honey. All tendency



to granulate or crystallize is eliminated or at least greatly retarded. The first honey was filtered early in June this year and the processed honey has since been subjected to every known test of temperature and light in an effort to induce crystallization, even at fifty-seven degrees F. the accepted best temperature for promoting such crystallization. So far the honey has remained clear and bright with no indication of crystals or granulation forming, or even the slightest foam or scum on the surface. From a scientific consideration of this process in its entirety, these results were expected and assured for it has long been known how crystals are formed and granulation induced.

In earlier work with the original process, much trouble was apparently experienced with fine air bubbles showing up in the filtered product but this has been eliminated so that no matter how foamy or how much air is present in the unfiltered honey, such air appears in the filtered liquid only as fewer, large bubbles which quickly rise to the top and disperse immediately after filtering. No intricate method or equipment for preparing the filter aid is therefore necessary.

Most honey producers know that if honey is heated to as high as one hundred sixty degrees F. while it is exposed to the atmosphere, there is a distinct and noticeable loss of flavor and the delicate bouquet due to the volatile dissipation at such temperatures. In the flash heating method herein used the length of time the honey is maintained at the temperature is a matter of seconds only and then only in an air tight, closed system from which no vapors or volatilized fumes can escape. The honey is therefore left unaffected in taste and flavor, something that is very essential.

Some few producers have expressed the doubt whether the consumer might not become suspicious or wary if the honey in the package is too clear and bright. The experience in every other liquid product marketed has been that the consumer will readily choose and prefer the attractively clear and clean looking bottled product. Who will say that the common turbid and sometimes muddy looking honey, with perhaps certain granulation already taking place, is tending to increase honey consumption? And after all, increase in honey consumption as a whole is what producers must be concerned with.

### "Bamboo Honey"

The first reference to sugar obtained from cane was made by Theophrastus in the third century B. C. He mentioned it as "honey which came from bamboo."—A clipping from Pharo Miller, Kansas.

## Death of Leon Saugier



A long life spent in close association with the bees closed at Hamilton, Illinois on October 6 when Leon Saugier passed on. Born at Festina, Iowa, February 28, 1868, Mr. Saugier came to Hamilton early in life and most of his years were spent in this vicinity.

As a young man he entered the employ of Dadant & Son and soon became expert in the manufacture of foundation to which he applied himself for thirty-eight years. In 1925 he retired and spent the remaining years caring for the small farm on which he had made his home during most of his life.

In 1895 he was married to Louisa Dadant, daughter of C. P. Dadant who survives him. Both Mr. and Mrs. Saugier found their greatest interest in their work and their home. Spare hours were likely to be spent in the open air rather than in society.

When not occupied with work in the factory Mr. Saugier was active in the Dadant apiaries and assisted in extracting large quantities of honey. He thus kept in close touch with the needs of the beekeeper and was able to keep abreast of the development of the industry. The first wax sheeter in the Dadant factory was installed under his supervision; and from that time forward he had a part in the development of the product until it reached its present perfection.

An ardent sportsman, he enjoyed annual hunting and fishing trips during the active years of his life. He was a great lover of animals and enjoyed the care of everything from the horse to the cat which were kept about the place.

Of a retiring disposition he was seldom seen at conventions or other public gatherings and was thus not as well known to the beekeepers as would be expected of one in the position which he occupied.

## Miss Davis' Honey Recipes

### Honey Date Nut Bars

- 1 cup stoned dates
- 1 cup chopped walnuts
- 1 cup honey
- 2 eggs, beaten
- 1 tablespoon melted butter
- 1 tablespoon lemon juice
- 4 tablespoons flour
- ½ teaspoon salt

Chop dates and nuts fine. Add honey and beaten eggs and mix well. Add melted butter, lemon juice, sifted flour and salt, and mix thoroughly. Spread evenly in a well greased shallow pan making layer about ¼ inch thick.

### Honey Oatmeal Cookies

- 2/3 cup butter
- 1 cup honey
- 2 eggs, well beaten
- 2 cups rolled oats
- 1½ cups flour
- 1 teaspoonful baking powder
- ½ teaspoon soda
- ½ teaspoon salt
- 1 teaspoonful cinnamon
- 1 teaspoonful cloves
- 1 teaspoonful nutmeg
- 2 tablespoons milk
- ¾ cup raisins
- ¾ cup chopped walnuts

Cream together the butter and honey, add the well beaten eggs, rolled oats, then the dry ingredients which have been sifted three times. Add the milk and beat well, stir in raisins and nuts. Drop by teaspoonsful on a greased pan and bake in a moderate oven (350° F.) for 12 to 15 minutes. Makes 2 dozen or more cookies.

### Honey Milk Mousse

- 2 teaspoons gelatin
- 2 teaspoons cold water
- 1 cup hot milk
- Pinch salt
- ¼ cup sugar
- ¼ cup honey
- 1 cup cold milk

Soak gelatin in cold water 5 minutes. Add to hot milk with sugar, honey and salt. Add one cup cold milk, beat well. Put in trays of refrigerator until firm. Turn into bowl and beat with egg beater. Return to tray and allow to stand until again partially frozen. Turn out a second time and beat. Return to refrigerator and freeze till firm. Serve with fresh or canned strawberries or other fruit. Serves six.

### Honey Fondant

- 4 cups granulated sugar
- 1 cup boiling water
- 1 cup honey

Combine the ingredients. Stir until dissolved. Bring to a boil and continue boiling over a very low flame



until the mixture reaches 244° F. or to medium soft ball stage. Pour into a slightly buttered large platter and cool to 110° F. Beat with a whisk or spoon until creamy, then knead with the hands. Put in a slightly buttered bowl, cover and set in ice box for 24 hours before using. Then flavor, if desired, with mint or vanilla, etc., or color. If desired mix chipped fruit or nuts or cocoanut. Shape into bonbons and dip with "confectioners" chocolate. Honey fondant is delicious and quite different. On standing, this fondant crystallizes into a firm velvet textured candy.

#### Honey Cinnamon Spread

1 cup crystallized honey  
Cinnamon to taste  
2/3 cup nucoa

Cream nucoa till light, add honey and blend well, add cinnamon to desired taste and blend well. This makes a delicious spread for cinnamon toast. Keeps well if kept in ice box or cool place.

## Salesmanship a Profession

By J. H. Sturdevant,  
Nebraska.

Wm. Wrigley, Jr. says: "Selling is one of the basic professions in the world today."

Absolutely! And I do not know of anything else that offers near as much to men and women of any age, with red blood in their veins and a love of variety and action in their hearts.

It has as many thrills as the best ball game ever played and there's profit in it, too, just as there is in baseball—large profits for the best players and even profit for the minor leaguers in the great game of Salesmanship.

I would advise any man or woman who wants to make a real success in life to take up Selling, if I thought he or she could develop the qualities necessary to make a real player at the game.

For women, especially, selling is desirable. Selling is merely persuading someone to do a thing we wish to have done; to buy something we want bought. We will have to agree that most women are masters of that.

The sale of honey offers a wonderful chance to build up a profitable business right around your own house, your school or your church community. The sale of honey has helped many a young man or young woman through High School or College to whom otherwise the expense might not have been within reach.

## The Passing of Sir John Protheroe



John Howell Protheroe died suddenly October 11 at his home, Tremunith, near Rustberg, Va., at the age of sixty. Heart failure was attributed to cause.

Sir John was born at Glamorgan, Wales, was a graduate of Oxford, and first came to this country in 1912. He returned to enter the World War serving with the French Red Cross until 1918. After the Armistice he returned to this country with his bride, the former Miss Gwendolyn DeLisle, who survives him.

Sir John was a veteran beekeeper being scientifically skilled in queen rearing as well as honey production and was serving as secretary of the Virginia State Beekeepers' Association at time of his death.

His clever style as a master penman created many friends and admirers throughout the nation. His death came as a great shock to Virginia beekeepers by whom he was loved as a true friend and neighbor.

May the peace of life eternal rest upon his soul forever.

—A. D. Hiatt.

## Are the Youngsters Quiting Bees?

J. H. Sturdevant says beekeeping is still the best agricultural pursuit. Why does this continually have to be

impressed upon us? I have noticed in the last few years that nearly all the bright young men in this state, capable of doing other things, are selling out and those lacking the brains to do anything else, such as myself, are buying up their outfits.

Geo. H. Harrison,  
Virginia.

[Not so out here, Mr. Harrison. In Illinois, Iowa, Nebraska and Indiana it is the young men that are buying out the old boys. What's the matter with you eastern beekeepers?—Ed.]

## Black Bees Again

Carl E. Killion said a mouthful with regard to black bees. The outfits I bought last year contained mostly blacks or bad hybrids. I saw the owner of one of them working with them just before I took them over. He handled the combs with one hand while using the smoker with the other.

At the time I did not understand why he handled his bees that way but I understand now perfectly. It is either that or get stung to death.

Not having learned to handle combs with one hand I get my helper to stand over the hive while I handle the combs. The helper's job is to keep a cloud of smoke over the hive. By the time I have half the combs out, using a wrecking bar to get out the first one and often leaving most of the comb still in the hive attached to the side, the queen and most of the bees have left and gone beneath. In some colonies I have never yet found the queen though I look for her every time I open the hive.

I have removed such a colony from the stand, substituted another hive and shaken the bees through an excluder and still not found the queen. There just doesn't seem to be any queen there but there is plenty of brood in all stages.

In bringing bees out of orchards these particular hybrids have gotten into all my yards. I used to work my bees all day without a veil. Often I lost track of where it and my smoker were. The smoker was just lit for emergencies. During the flow colony after colony was opened without veil or smoke. One of the local beekeepers caught me doing this in my sleeveless undershirt. He could not understand it. He left in bewilderment, shaking his head.

Back in the Puritan days I would have been promptly burned at the stake as being in league with the devil, but I don't do it any more. I get my smoker to belching white clouds and have my veil tied tight around me, and, I must confess, I have even been guilty of wearing gloves at times.

Geo. H. Harrison,  
Virginia.

## Thanksgiving

November brings the annual Thanksgiving holiday which is an American institution, founded by the colonists soon after they reached this continent. In a new and undeveloped country they faced privation and struggle but looked forward to a future of abundance and security. When their meagre crops were harvested they set aside a day of thanksgiving for the blessings which they had.

We have gone far since that day and a large portion of our population is surrounded by such luxury as was never known in the history of the world. Thanksgiving Day remains as a national institution but its original purpose has long since been lost to sight. It has become a day of feasting and gaiety with little thought of the source of all our abundance.

It is well that we stop once a year to take stock of the many privileges which we enjoy and to consider the plight of the less fortunate. Certainly most of us would find a very long list if we were to take an inventory of the things for which we have reason to return thanks.

## South With the Birds

Already some northern beemen are on their way south for the winter months. Each year sees an increasing number of honey producers who pack their bees, sell their honey, and go south for the period of cold weather. Those who have no other business often find it much to their advantage to make such a change. It costs no more to migrate than to buy coal and meet the extra expenses which winter always brings. The change brings advantages in the way of improved health and a wider outlook on life. We congratulate those beekeepers who are able to go south with the birds.

## National Honey Week

Once again we call attention to the fact that National Honey Week is just ahead. The individual beekeeper should remember that the local success of this movement depends upon him. No matter how much or how little is done by the Institute and the industry in general, each beekeeper can make it a success in his own neighborhood.

We repeat here the suggestions which we offered last year for local activity.

1. Ask your librarian to call special attention to books on bees at your local library during the week. Feature especially books about bees rather than books on beekeeping since the general public does not care to learn how to produce honey. Ask your library to secure such books if not already on hand. Maeterlinck's "Life of the Bee," Sharp's "Spirit of the Hive" and Pellett's "Romance of the Hive" are examples of books of this kind.
2. Ask your local baker to feature items made with honey. If he does not have proper recipes write to the American Honey Institute and send five cents for a copy of "Honey in the Bake Shop."
3. See your superintendent of schools and arrange for talks about bees and honey. Provide for an illustrated lecture to high school students and college students wherever possible.
4. Interest your local newspaper in printing stories about bees and honey. It is best where possible to make use of a story of local interest. People are always interested in what is happening in the community.

5. Provide an observation hive for some prominent location. The lobby of the bank is a good place or the window of a prominent store.
6. Write to American Honey Institute at Madison, Wisconsin, and ask for their suggestions for co-operating. Send along some stamps or bills to help pay expenses since they are assisting thousands and it takes money to pay for printed matter and postage.

In addition if you are fortunate you may be able to engage the moving picture films covering the life of the honeybee for your local picture house or your local school or college. These films are very interesting and give a good idea of beekeeping to the public. They are to be obtained from the United States Department of Agriculture or the Extension Department of your state college of Agriculture.

Remember that the time is short and it is up to you to make Honey Week a success in your community. November 10 to 16 are the dates.

## Would You Buy?

Next time you have occasion to go to the grocery store take a few minutes to look around and make note of the appearance of the honey which is on sale there. Perhaps it is your own. Try to imagine yourself a stranger to honey production and interested only in the purchase of something for the family table. Is the product displayed in a way to attract your attention and make you wish to buy?

On one occasion the writer visited a number of Chicago stores for the purpose of learning something about consumer demand for honey. In some of the stores the most unattractive thing on the shelves was the honey. Some of it was in poor containers with messy labels with a smear of honey to catch the dust. One must be anxious to buy honey to be satisfied with such a product. Too many beekeepers are careless in putting their product on sale and offer something which they would not buy themselves if it was offered by a stranger.

## Honey Jelly

The publishers of this magazine must confess to some disappointment in the lack of appreciation of honey jelly as a table spread. Nearly everybody is enthusiastic about it on first acquaintance. One hears nothing but praise from those who try it, but little attempt has been made to find a place for it in the market. The few attempts which have been made have been anything but successful. In most cases nothing has been done but to make a few jars of the jelly and place them on the shelves of some grocer where they have since remained.

The housewife is confronted with such a bewildering variety of new food products of late, that she has ceased to be interested in anything just because it is new. Products which are successful are backed with heavy advertising. The housewife hears so much about them and has them so often called to her attention that she is finally convinced that she must include them in her grocery order.

Honey jelly properly made from mild honey is a high class product and if pushed in the markets would provide an outlet for an immense amount of honey. The addition of fruit pectin to the honey gives the product a jelly form instead of a sticky liquid. It is thus much easier to handle and far less messy when used. It overcomes the most



common objection to honey on the part of the housewife.

Honey jelly is good but it will never become a popular food in these highly competitive days without some high pressure salesmanship behind it.

## Pressure on Prices

There is a terrific pressure on the part of the buyer for low prices for all kinds of produce of late. This has been very apparent in the honey markets where the season opened with prices below last year even though the crop was short. So much of the output is now moved by comparatively few buyers that the producer finds it difficult to hold his own. When one buyer makes purchases for a hundred stores instead of a hundred men each buying for one store the seller is at a disadvantage.

Low wholesale prices are responsible for turning many producers into retailers. Roadside stands in thickly populated regions offer a chance to move large quantities at reasonable prices. The producer in a sparsely settled region, however, is dependent upon the wholesale market and needs some kind of organized selling agency to compete with the centralized buying with which he must deal.

## The "Best" Honey

According to old world beekeepers, heather honey is the best in the world. American beekeepers might doubt that statement but from all accounts heather honey is of high quality and quite unlike anything with which we in this country are familiar.

Heather is also called "ling." The following from the Scottish Beekeeper describes the product: "Fully ripened ling honey is not a liquid but a jelly; it will not flow, it must be pushed, and according to some authorities it never granulates. A jar of ling honey can be inverted without any honey coming out and this without the presence of any granulation."

From the above description it can be seen that the honey extractor would be of little use to the Scottish beekeeper in the heather districts. His product must be sold in the comb because it is too thick to extract.

One wonders whether the American consumer would regard this heather honey as the "best" honey or whether his prejudice would favor the kind he already knows.

## Place of Bees in Agriculture

The public has but little appreciation of the place which bees fill in the nation's agriculture. If the honeybee was to be suddenly removed it is probable that the output of certain crops would decline to an alarming extent. Numerous experiments with fruit trees screened to exclude all honeybees indicate that under average conditions a very substantial portion of the crop is due to their visits.

Any estimate must of necessity be speculative but if we are to judge by results of experiments under controlled conditions it is very conservative to credit the bees with ten per cent of the crop of such fruits as pears, apples, plums and cherries. Some varieties appear to yield very sparingly in the absence of the bees. Cucumbers and melons likewise depend largely upon the bees for pollination and it is probably safe to say that more than ten per cent of these are the result of the bees. Add to the value of these crops the yield of seed of alsike, sweet clover, and white Dutch clover which comes by their assistance and we have a very tidy sum to their credit.

The value in comparison of the honey crop is very small. One may very safely conclude that for every dollar which the beekeeper gets from the sale of honey and wax, his neighbor secures at least five because of the larger crops of fruits, vegetables or seeds resulting from the services of the bees in the distribution of pollen.

With official figures estimating a single year's apple crop at from one hundred and fifty to two hundred million dollars, it is not hard to believe that the bees add an average of at least a hundred million dollars each year to the value of the agricultural crops of the nation in addition to the value of the honey sold. It seems quite likely that the value is much greater than that.

## Rewards of Beekeeping

Beekeeping attracts two distinct types of men. On the one hand we find the men with commercial instincts who keep bees as a business. Such men of the type of J. S. Harbison and Adam Grimm keep bees to produce the largest possible amount of honey to the end that they may enjoy commercial success. They measure their success by the size of the bank account and the number of carloads of honey which they sell. This type has become dominant in recent years since the pressure of economic necessity demands so much of us all.

The other type is represented by men like Doctor C. C. Miller, L. L. Langstroth and G. M. Doolittle who are beekeepers because of their love for the bees. They make their living from the sale of honey, perhaps, but their interest first is in the atmosphere of the apiary and the environment in which the bees permit them to work. Some men of this type look upon business as a vehicle to provide the means which will enable them to live a life among the bees. Never do they look upon beekeeping primarily as a commercial business.

Thus the rewards of beekeeping must depend upon the kind of men who engage in the business. To the man of commercial instincts the rewards may be small if he chances to locate in a region of limited crops. To the man of the other type the rewards may be large even though his crops be small because he finds his greatest satisfaction in the kind of life which beekeeping makes possible.

## A Tariff on Beeswax

At the meeting of the Honey Producers' League at Detroit a committee was appointed to study the imports of beeswax and make a recommendation concerning the attitude of the organization on the question of a tariff. The question is raised at frequent intervals as to whether the beekeeper would not be benefited by an import duty on beeswax.

This question is one which merits very careful study and no recommendation should be made without consideration of all the facts. It appears that the principal competitor of beeswax in the market is not imported beeswax but other waxes which have very largely replaced beeswax in industrial markets for one reason or another.

If a tariff should be placed on beeswax while competing waxes are permitted to come in free it would place beeswax at a further disadvantage and serve to extend the use of the competing product. If there is to be a tariff on beeswax, there certainly should be a tariff on other waxes as well.

High import duties are now very generally raised against incoming manufactured products by most of the great nations of the world and the same holds true to quite an extent for raw materials as well. The net result has been to strangle world trade to an extent which is in part responsible for the world wide depression. Too often the supposed benefits have resulted in loss of trade which more than offset any advantage.

No light task confronts this committee if they are to serve the beekeepers properly. Beeswax has already been displaced in many industries and it will require some careful study to learn the extent of this displacement and the source of the waxes which now serve instead. All the facts should be placed before the next convention.

## The Little Things

There was a time when, at conventions, much of the discussion was given to such questions as the best fuel to use in smokers and to similar subjects, hardly thought of sufficient importance to find a place on present-day program.

After all, it is the little things which make life agreeable or the opposite. What can be more irritating than to discover that the smoker has gone out when the bees suddenly become cross in the middle of a hive manipulation? To find that there are holes in the bee veil is equally unpleasant under similar conditions.

# Arranging the Colony for Winter

By W. E. Lindsay,  
Colorado.

IT is a question whether we should switch the brood nest above for winter. There are some things in favor of it and many against it. I refer to those who run the two-story 10-frame Langstroth hive the year around.

When we extract, we sort four to six pretty good combs of honey into the second story and leave it there for winter, in addition to what the undisturbed brood chamber contains. The brood chamber supply varies considerably, some colonies packing it as brood diminishes, others leaving it light. None were heavily provided during this cycle of dry years.

Since the bees will work upward during the winter, it follows that we should leave the heaviest stores on top. I have never known the bees to go down in winter and have known a few to stay down and never go up at all.

Then when we extract, we often find most of the latest brood in the top body so we leave it with the honey and it is usually heavier than the brood chamber. We do not switch the two bodies. It is a fact when we once used the excluders, the brood chamber was packed with honey better than now. About the only thing in favor of switching or exchanging the two bodies that I can see is that the bees will be warmer when they are above.

In switching, the only measure is hefting each hive when they are pried apart. It is pretty hard to judge and one cannot tell whether the brood nest is above or below without taking out combs and looking through the upper hive which is too much disturbance at this time of the year. By the middle of October the joints between the upper and lower bodies will be sealed with propolis. If switching is not done until in November, it is apt to be too cold for them to re-seal the joints, leaving the hive more open in windy weather.

Undoubtedly bees would winter better in a single story. I sometimes have a notion to try it. The single hive is lower down, more out of wind, more or less snow will lie against or near it which would leave it below the wind line.

I have a half-inch hole bored through the back end handle of all my brood chambers. Nothing I have ever done seems to do more good than

this little thing. I never have to bother about ice and snow in the entrance. Hives face east and in the afternoon sun the bees enjoy it. They are not bothered with wet combs so much in the spring. This arrangement lets more air in the hives and in summer it makes an additional entrance which the bees use to the fullest extent and also it assists in ventilation.

To winter in a single story, of course, would mean going through all the colonies before the last extracting and taking out light combs and putting in heavier ones. It would also mean lifting off the honey crop and putting it back on again. In good years gone by, we used to extract twice; first, about August 7th or 8th; second, about September 15th. 1929 was the last year we extracted twice. We usually switch from October 7th to 15th. I have introduced queens from the South after the two bodies were switched with good success.

Probably the "Dadant" hive would solve all the objections because it would give the queen all the room she needs but if the supers are the same depth as the brood chamber, would they not be too heavy to handle when full of honey? If the super were shallower, we could not interchange with the brood chamber. I winter outdoors without protection as is usually done in the intermountain section. [The supers are shallow 6½ inches deep.—Ed.]

I tried cellar wintering in a small cellar several years. When I wintered fifty colonies in it, they wintered well. When I put in a hundred and fifty, they did not, becoming uneasy before spring.

It is thought by most of the larger beekeepers in the West, that winter packing does not pay. The bees will shift honey to a considerable extent themselves, either from above or from below, according as the brood nest and winter cluster is above or below, especially if the weather is warm through October and November. Sometimes this switching of honey will defeat the expected results of switching. If the fall is long and warm, they will continue using the honey where they are and when they do move up, they will have more honey there than if they had moved up early.

## Civil Service Examination for Assistant Physiologists

An examination is announced for an Assistant Physiologist in Apiculture at a salary of \$2,600.00 per year for the Bureau of Entomology and Plant Quarantine, Department of Agriculture at Washington.

Applications must be on file with the United States Civil Service Commission at Washington, D. C., not later than November 4. This is a competitive examination and will be judged on education and experience and publication of thesis or discussion to be filed with the examination.

The thesis, covering not less than 2,500 words, which the applicant is to offer, and to be submitted with the application, must be on some subject pertaining to animal physiology, preferably invertebrates.

Necessary forms for the examination may be obtained from the Secretary, Board of United States Civil Service Examiners, at any first-class post office or from the United States Civil Service Commission in Washington. Ask for form covering examination for Assistant Physiologist (Apiculture), Bureau of Entomology and Plant Quarantine, Department of Agriculture.

## Washington Figures

While the year's honey crop is being harvested, no definite figures can be given on the yield in Washington but many beekeepers say they are not taking half as much honey as they did a year ago. The crop for the state was light.

Most producers are receiving from six to seven cents per pound for their honey but California honey is also being sold as low as 4½ cents per pound.

Idaho yield is reported from half to two-thirds of normal and Montana about a quarter crop.

Lower yields are attributed to a late cold spring and sharp frost later; lowered condition of colonies in recent years, spray injury in orchards and potato fields.

I. L. Neill,  
Washington.

## Progress Report of Dominion Apiarist

This report for the years 1931, 32 and 33, just received from C. B. Gooderham, Dominion Apiarist of Canada, summarizes briefly the work done by the Experimental Farm Apiaries during the period.

The total peak production of the provinces was reached in 1931 when the honey crop in Canada amounted



to 29,666,097 pounds. 1932 and 1933 brought a heavy reduction because of drouth which, however, helps the marketing situation.

— o —

In a test of Caucasian and Italian bees in the vicinity of Ottawa, the Italian bees showed themselves superior to the Caucasians as honey gatherers and proved to be equally as hardy for the severe winter conditions.

— o —

In a comparison of size of hives under Ottawa conditions, results indicate that hive size has little or no influence on wintering or the amount of honey produced, for no group, whether in 10-frame, Jumbo, or Modified Dadant, showed any decided advantage over the other.

— o —

Adding package bees as a means of strengthening weak over-wintered colonies over a period of eight years proved that the colonies built up to greater strength for the honeyflow and produced a greater crop but the value of the increase was little more than enough to cover the cost. Tests over a period of eight years show that the use of package bees for production purposes is a profitable undertaking, particularly under Manitoba conditions, the packages arriving early producing a greater surplus than the late arrivals. The average production in all early packages, over eleven years, was 149.29 pounds as compared with 84.51 pounds for later arrivals. A heavy loss of queens was experienced in package bees. Bees arrived at dates ranging from April 25 to June 8.

— o —

Package bees in comparison with over-wintered colonies showed that, in Manitoba, over a seven-year period, the over-wintered colonies gave an average gain of \$2.89 more than package bees. On Prince Edward Island, the difference was over-wintered colonies \$10.67, average returns for packages, \$9.87. In Quebec, the package bees in a single year test slightly outyielded the over-wintered colonies.

In Alberta while package bees proved highly satisfactory, it was found that over a period of several years it was more profitable to carry the bees through the winter.

— o —

The report also includes the results at the Morden station in Manitoba on making increase which were reported in past issues of this Journal by Erdman Braun.

— o —

Space limits further detailed account of this splendid publication which covers about forty pages with reports on experiments on swarm control, methods of supering, sterilization of combs, effect of sunlight on the colony, over-wintered colonies versus package bees for pollination, wintering bees and queens, honey storage and fermentation.

## National Honey Week, November 10-16

THE big time is here! National Honey Week which we hope now is for you a routine program, a part of your every year effort to cooperate in a nation-wide attempt to popularize the use of honey. It is a very appropriate time because it comes just before Thanksgiving, in the first cold period of autumn when sales of sweet things usually reach a high point. In all records of honey sales, November and March are the two peak months. So National Honey Week coming November 10th to 16th is the most important time of year for a nation-wide effort to bring honey to the attention of the American housewife.

Send to American Honey Institute for a six-page Honey Week schedule giving cooperation between beekeepers' associations, schools, churches, departments, etc. Do something. Don't just read this and forget about it. Make National Honey Week a big success.

There are special folders, posters and recipe leaflets available from Kellogg's, Battle Creek, Michigan. Write them.

During the Farm and Home Hour of the United States Department of Agriculture, Dr. Lothrop of the U. S. Bureau of Chemistry at Washington will give a broadcast; definite time

not available. Listen in during the week, however, each day, through the usual Farm and Home Hour program.

In addition, Gold Medal Foods, Inc., are spending a quarter of a million dollars on their Honey Chocolate Cake campaign as announced on page 531. Watch the magazines mentioned there for ads in October and November issues. Check on your local stores for feature displays of Honey Chocolate Cake.

Many magazines are carrying honey articles or recipes, Successful Farming, Red Wheel Magic, The Phoenix Flame, Hostess, The Dakota Farmer, Baker's Helper, Michigan Farmer, Farmer's Wife and a number of food papers.

Just as this page is ready for the press, Betty Crocker of Gold Medal Foods wires us that she will give mention of National Honey Week in her talk on November 13th covering a nation-wide network. Beekeepers should get this broadcast, the usual broadcast of Betty Crocker on November 13th in which she will mention National Honey Week. And remember that this reaches the entire nation.

Now, do your part. Don't let the other fellow do it all.

## An Appeal for National Forests

Our senior editor, Mr. C. P. Dadant, has a personal letter from Gifford Pinchot of Pennsylvania. We give parts of it as follows:

"I appeal to you because the National Forests are again in serious danger. Another attempt is under way to get the National Forests and the forest work of the Government transferred from the Agricultural Department, where the forests are safe and the work well done, to the Department of the Interior, from which they were taken because of wretched management.

"The present attempt is made under cover of an effort to change the name of the Interior Department to the Department of Conservation and Public Works. Transfer of the National Forests and the Forest Service is not mentioned but is planned for later on.

"Conservation is too broad a subject to be confined to one department. A Department of Conservation would be as illogical as a Department of Typewriting or of Wastebaskets.

"The conservation policy, and about every important conservation movement for thirty years, originated in the Department of Agriculture. It has shown practical horse sense in dealing with natural resources intelligently, uprightly and without fraud or loss.

"The Forest Service is completely free from politics where it is. Ickes is straight, but the whole history of the Interior Department is reeking with politics. The tradition of the Interior Department is to put private interests first. The tradition of the Agricultural Department is to put public interests first.

"Wood is a crop. Forestry is tree farming. It belongs in the Department of Agriculture with all other farming and production from the soil. Let the National Forests stay where they are."

Sincerely yours,  
Gifford Pinchot.

## Honey Spread

2/3 cup nucoia

1 cup crystallized honey

Cream nucoia till light, add honey and blend well. Keeps well in the ice box.

# News from Oklahoma

By  
Clarence J. Tontz



**A**FTER the rains, that had broken the summers' drought, had settled, much vegetation seemed to come to life. From the middle of September up to the present time (October 4) with the exception of a few days of rainfall accompanied by cool weather, the days have been hot and sultry with a heavy atmosphere—ideal for honey gathering. The bees took advantage of the opportunity and worked full blast throughout the day.

Heartsease (locally known as smartweed) of which a picture is shown above, was the chief source of nectar for the surplus honey gathered during the fall honeyflow. A few other ordinary flowers contributed a minor share of the surplus. About twenty pounds of surplus is the average per colony up to the present time for the fall flow. The bees will continue to gather honey and pollen until the frost arrives.

Received a letter from L. J. Austin, state inspector, in which he says that American foulbrood has nearly eliminated a "certain" kind of beekeeper in the state. He also states that honey sells for a higher price in our state than in most of the other states. He presents a problem when he says if state inspection should be abolished, American foulbrood could not be controlled. That would mean less honey produced, thus making it cost even more than it now does. As it is, there are thousands of people on the farm and in town who are producing and consuming their own honey; but if their colonies were wiped out they could not afford to purchase it from the market.

I recently examined a beekeeper's colonies that, due to improper care, last spring swarmed to excess so that the size of his apiary was almost doubled. The drought came on, so now he has a lot of hives with few bees and very little honey in them.

The tomb of Childeric, in France, was discovered in 1655. Among the relics were 300 small golden models of bees. When Napoleon was crowned emperor, he chose these bees for the decoration of his coronation mantle.

## Honey Stands Contact Motorists

By C. M. Littelljohn,  
Washington.

All along the broad highways little honey stands, with signs a quarter mile, a half mile or 300 feet in advance, greet the eye of the motorist

in Oregon and Washington. Honey from Pacific Northwest hives is thus enticingly sold direct to the honey fancier.

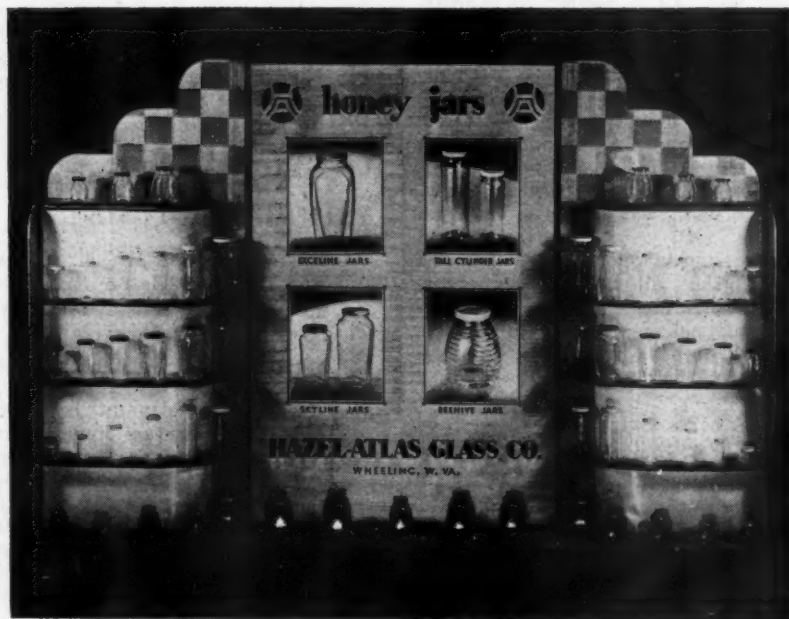
Of course, the best bet in the development of business at these honey stands is to have advance notice of the stand before it is reached so that a frame of mind may be created in the prospect and the tourist does not come upon the stand too suddenly.

To arrive and immediately pass a stand without advance notice often means the loss of a sale through the lack of preparation since the average motorist does not wish to turn back once he has passed a place.

Distribution problems and the middlemen are eliminated from the picture as direct contact is made with the customer. This contact is made at the psychological moment. The motorist on a long journey may be thinking of making camp or stopping for lunch. Honey may be just the thing he craves.

It is direct distribution of the simplest nature. What is nicer than fresh honey, obtained close to the hive, to take home and be consumed at leisure?

## Hazel-Atlas Display at Detroit



**M**UCH interest was displayed in the Hazel-Atlas Glass Company Exhibit at the recent International Convention of Beekeepers at the Hotel Statler, in Detroit, October 7, 8, 9, and 10.

External lighting effects served very attractively to illuminate the photographic murals of honey jars, mounted on warm gray veneer, in the central part of the display. The

parchment pillars at either side presented the appearance of ground glass columns. Interior illumination of these pillars further enhanced the beauty of the display and served also to illuminate the honey jars in a very attractive manner.

The new Excelsior Jars were introduced, and also the Tall Cylinder, Skyline and Beehive Jars complete with Hazel-Atlas Closures were displayed.





## Tile for Hive Stands

LEE STEWART at Newport, Indiana uses hollow tile as shown in these two pictures as hive stands with short alighting boards with tin strips at either upper corner to rest on the regular hive bottom board.

These tile may usually be obtained as culls or seconds from any tile plant and may be shipped cheaply enough by freight to make the total cost of each stand not to exceed ten to twenty cents per colony.

For handling comb honey supers, these stands come up high enough from the ground to bring the top of the hive in an easier position for work so the operator does not have to stoop or bend. Flatter tile might be preferred for extracting supers. The tile are strong and will hold a heavy load without breaking.



## Second National Honey Cookery Contest

THE second National Honey Cookery Contest at the International meetings at Detroit, October 7 to 10, was not quite the success the first contest at Valdosta was but showed a decidedly hearty support even though October is a poor month for such a contest, coming when homemakers are busy canning and have less time for trial baking and cooking.

The prize winners are as follows:

### Fruit Cakes

- 1—Sister M. Christine, Mt. St. Benedict, Crookston, Minnesota.
- 2—Miss Christine Huff, Caledonia, North Dakota.
- 3—Mrs. Howard Chafin, Elkhorn, Wisconsin.
- 4—Sister M. Bennet, Mt. St. Benedict, Crookston, Minnesota.
- 5—Mrs. W. R. Thomson, Milwaukee, Wisconsin.
- 6—Sister M. Praxedes, Mt. St. Benedict, Crookston, Minnesota.
- 7—Mrs. Howard Potter, Jr., Ithaca, Michigan.
- 8—Miss E. Chafin, Elkhorn, Wisconsin.
- 9—Mrs. Chas. Kinzie, Arlington, California.
- 10—Edwin Sluyter, Detroit, Michigan.

### Cookies

- 1—E. Chafin, Elkhorn, Wisconsin.
- 2—Mrs. A. A. Doenges, Defiance, Ohio.
- 3—Waysmith Roy, Sparta, Wisconsin.
- 4—Mrs. Ed. Rauchfuss, Powell, Wyoming.

- 5—Mrs. H. Chafin, Elkhorn, Wisconsin.
- 6—Sister M. Praxedes, Mt. St. Benedict, Crookston, Minnesota.
- 7—Mrs. A. G. Gill, Evanston, Illinois.
- 8—Mrs. W. Diehnelt, Menomonee Falls, Wisconsin.
- 9—Julius N. Roy, Fenwood, Wisconsin.
- 10—Mrs. Paul Daellenbach, Brookside, Montana.

### Candy

- 1—Mrs. H. W. Knight, Dalton, Wisconsin.
- 2—Mrs. A. Bodenschatz, Lemont, Illinois.
- 3—Sisters St. Benedict, Crookston, Minnesota.
- 4—Louise Diehnelt, Menomonee Falls, Wisconsin.
- 5—Miss E. Chafin, Elkhorn, Wisconsin.
- 6—John Karch, Madison, Wisconsin.
- 7—Esther G. Elliott, Timmoth, Colorado.
- 8—J. N. Roy, Fenwood, Wisconsin.
- 9—Mrs. R. Glock, Roswell, New Mexico.

## Salt Lake County Statistics

Salt Lake County is growing in importance in the honey industry of the Rockies. The county boasts of more beekeepers than any other county in the state. It has a total of 180 bee-

keepers, an increase of 63 as compared to 1933, according to E. F. Hillman, county bee inspector of Salt Lake City.

A total of 2,175 apiaries, an increase of 266 over last year, were maintained by Salt Lake county beekeepers in 1934. The majority of the owners have less than 10 colonies.

Glen Perrins,  
Utah.

## Attempt Made to Spread Disease

Sheriff's officers are investigating an attempt to destroy several hives of bees owned by Curtis Shader, of Sunnyside, Washington. The hives were in a field near Emerald; and Shader noticed that someone had scattered thousands of dead bees, soaked in honey, near the hives, in an effort to spread disease among the larvae in the hives. Mature bees would not be affected by the diseased honey, and it will take a few months to determine the amount of damage done to the larvae. I. L. Neill, Washington.

## Overcoming Difficulties in Introduction

I have had cases of difficult queen introduction, especially in introducing queens to laying worker colonies.

This is now my procedure: Remove the hive cover and replace it with a single sheet of newspaper, a queen excluder on top of the paper. On top of the excluder place a nucleus with a queen. Leave alone from a week to ten days. Then remove the excluder and remains of the paper. Good results are obtained this way.

A. J. Van Rossum,  
Minnesota.

# The International Meeting

**I**F you weren't at the International Meeting at Detroit, October 7-10, you missed a great gathering. Beekeepers came from all over the continent—California, Utah, Canada, Georgia, Texas, Alabama, all the Central West. Of course, the heavy attendance was from the surrounding territory, Michigan, Indiana, Illinois, Iowa and Ohio; there were probably two hundred and fifty, possibly three hundred. The banquet was a great success. The menu is given on page 531. A hundred and seventy people sat down to a generous honeyway meal, which was served with American Honey Institute as host.

The Michigan Association, hosts to the visiting beekeepers, did a splendid job and all those who took part in planning the program should be highly commended for their service. Prof. Kely of Michigan is certainly to be congratulated on the success of the occasion.

We did not attend all of the sessions and so are not prepared to give a full report. There were three from the American Bee Journal staff at the meetings. If we do not publish notes of the entire program in this issue, there will be more next time.

The Second National Honey Contest was of great interest. A report of this is given on page 519. There was also a demonstration in honey cooking for the benefit of the ladies. The general exhibit of honey, honey products, honey containers, and bee supplies was more attractive and larger than at Valdosta. It was really a class-A exhibit and the visitors certainly enjoyed it because they could always be found in the exhibit hall at all times of the day.

The local theatre obligingly showed "The Keeper of the Bees" and then as an added attraction, just incidentally, the Tigers won the World's Series and put on a demonstration which was a demonstration.

## The Program Boiled Down

While we did not listen to all the talks because of various duties, meetings and committee groups, we will try to report in brief those which were heard.

"Producing and Shipping a Sixty-Ton Crop"—Morley Pettit, Georgetown, Ontario, Canada.

Grade honey for uniformity.

In modern beekeeping, using packages for replacement, it is possible to replenish losses in fall and winter with less concern over perfect wintering and exact care to individual colonies which the old kind of beekeeping used to demand. Mr. Pettit uses three or four hundred packages each year which he ships to himself

from his Georgia apiaries to be received in Canada the last of April. The packages build up until about the 15th of May and then an extra pound of queenless bees is added to each to give them a big boost in time for the honeyflow.

— o —  
"Progress in Production Methods"—M. J. Deyell, Gleanings in Bee Culture, Medina, Ohio.

The old ways contrasted to those of today. The blind Huber discovered the facts of bee behavior, Dzierzon and Langstroth perfected the hive, Quinby introduced commercial beekeeping and then we came to the first extracted honey era to be followed by the comb honey period which resulted in brood contraction under the leadership of men like Heddon.

The introduction of the Pure Food Law in 1906 brought in the second extracted honey era and from that time up to now, our efforts have been in the simplification of apiary management. This period has brought the great development of the package bee shipping industry, a better understanding of swarm control measures that has practically removed this problem from the industry.

The food chamber idea was introduced by George Demuth; top supering, standardization of equipment, increase in outapiaries and especially a great increase in migratory beekeeping.

These changes do not bring a danger of over-production but probably, due to the increase publicity for honey, there will be a problem of under-production.

— o —  
"Effect on Honey of Various Processing and Storage Temperatures"—Dr. V. G. Milum, Illinois.

This has been published in bulletin form, and may be obtained from the University of Illinois. We will try to have a brief outline of the bulletin in another issue. \* \* \* \* \*

Dr. Milum also mentioned his studies on the lesser wax moth. He has found that most of the small moths causing damage to the surface of comb honey are the larger wax moths which do not grow up because they do not have enough protein material to feed the larvae and cause their normal development. The lesser wax moths do little or no comb honey damage.

— o —  
"Busy Bees Bring Bending Branches"—H. D. Hootman, Michigan State College.

Readers will remember that Don Hootman is a pioneer in the field of pollination studies and several articles were published by him a few

years ago in the Journal. A state bulletin was put out in Michigan and a bulletin in collaboration with the American Bee Journal with the title of his present talk, "Busy Bees Bring Bending Branches." Copies of either bulletin may be obtained from the American Bee Journal office. \* \* \*

The old home orchard had no pollination program. Now with huge tracts of orchard planting, pollen must be transferred through the means of insects, to get fruit. Beekeepers must provide the bees. \* \* \* \* \*

Fruit men are also anxious to rid their particular localities of foulbrood so beekeepers do not have this problem to fear in Michigan as they used to.

— o —  
"The Preparation of Cut-Comb Honey"—James Hilbert, Michigan.

By using shallow supers and thin surplus foundation, inserted an eighth of an inch away from the end bars and a half inch from the bottom bars, Mr. Hilbert is able to produce a quality bulk comb honey which averages 30 per cent more volume than sections. The first supers are left over from the season before and are used as starters, then second supers are added underneath in rotation. The honey is removed when finished while still white and is packed as small cellophane wrapped chunks with a special equipment which has been devised by Mr. Hilbert and offered for sale to those interested in producing a quality individual or section size comb honey without the use of sections.

— o —  
At the evening session the first day, Field Editor Pellett of American Bee Journal and Editor Root of Gleanings gave two talks on the old days. We hope to be able to publish Mr. Pellett's paper. Mr. Root gave many interesting notes of his long experiences.

— o —  
"The Homemaker's Use of Honey"—Miss Roberta Hershey.

Some Michigan women live and feed their families at costs varying from 17 cents to 50 cents per person per day. Some as low as 3 cents per person per day. \* \* \* \* \*

In a survey in Michigan, it was found that about 2.6 pounds of honey were used per person in the average home. Over half of those interviewed did not use honey in cooking or baking. Some did not use it because it was too expensive, some because they did not think of it and some because they did not know how.

Remarking about the excuse that honey is too expensive, Miss Hershey brings up the fact that the price of honey varies too much. It may be



8½ cents at one place, 20 cents in another. It should be more uniform like sugar. Some housewives complained that they could not get honey in quantities. \* \* \* \* \*

"Don't know how to use"—The distribution of bulletins and recipes on honey would take care of this. \* \*

"Don't like it"—This is probably the result of going on a biscuit and honey bat. Anyone who does that is not likely to be very fond of honey for some time to come. This is, of course, the direct result of not knowing how to use honey. Housewives must be taught new and easy ways to use honey and not expensive ways. Simple recipes. — o —

President Kelty—"If the present honey consumption of two pounds per person were to be increased ½ pound in this country, there would immediately be an acute honey shortage." — o —

"Free Press Institute of Home Economics"—Miss Marion Sawyer, Detroit Free Press.

Newspapers are always glad to help local industries. They are willing to help beekeepers in all their efforts to increase the use of honey. \* \* \* \*

In the Free Press daily food column, the use of honey in canning is featured, questions about honey are answered or referred to American Honey Institute. Honey is featured in cooking, news of honey is given, demonstrations are given in neighborhood theaters along with cooking schools and the evening classes for women; also in a traveling kitchen within fifty miles of Detroit. \* \* \* \*

Honey is especially emphasized during Honey Week. The Free Press daily telephone calls frequently are on the use of honey and the Institute materials are used in these questions. The penny food leaflets feature honey. \* \* \* \* \*

Get your local paper to do the same. Give the Institute material and honey recipes. Papers are always glad to use that material. — o —

Miss Mary I. Barber, the Kellogg Company, Battle Creek, Michigan.

The Kellogg Company has a new leaflet which is the seventh in a series of honey leaflets with which beekeepers are familiar. It features honey in a new and striking way. Copies of this may be received by request from the Kellogg Company, Battle Creek, Michigan. \* \* \* \* \*

Miss Barber showed a sample of coffee honey and of honey almond butter and reported seeing honey touronne in the South and almond nougat and honey in a hard candy. \*

The only way to increase the use of honey is in cookery. Feature honey especially at Christmas, ask for the Kellogg store banner featuring honey. Use honey leaflets, get your home economic leaders interested. \*

The American Honey Institute now has a real standing in home economics and food circles. — o —

"The Development of the Honey Center Golf Balls"—E. LeRoy Pelletier, Jr., L. A. Young Golf Company, Michigan.

In a golf ball with a standard weight of 1.68 ounces, resiliency is a great factor. The only variable weight unit in the golf ball is the center. Castor oil, glue, water, etc., have been in use for the center. They must be weighted with lead or mercury. \* \* \* \* \*

Honey has just the right weight when forced into a rubber bag in the center of the golf ball. It makes an extremely resilient ball which has great favor. \* \* \* \* \*

At the present time, the Young Company uses only non-granulating honeys of low dextrose content. They make two honey centered golf balls, "Honey Boy" and "Walter Hagen." — o —

"Honey At Your State Fair"—Mrs. Duax, Illinois.

Offer prizes. Prizes in Illinois increased the culinary exhibit 100 per cent at the State Fair. Use honey demonstrations with recipes every day. Give radio broadcasts. Pass honey leaflets and prize honey recipe leaflets. \* \* \* \* \*

A worthwhile program for every state. — o —

"The Honey Cookery Contest for 1934-35"—Mrs. M. F. Jensen, Secretary American Honey Institute.

There were 258 entries from twenty-four states with a three months' preparation period in 1934. 1935, with a six weeks' preparation period, had a distribution of 2,000 leaflets, with information about the second National Honey Cookery Contest. There were less than a hundred entries and these were primarily from beekeepers' wives. \* \* \* \* \*

It is suggested that there be school contests and more general interest on the part of beekeepers in getting homemakers, not beekeepers' wives, to enter the next contest. The prizes and results of the second National Honey Cookery Contest are given on page 519. — o —

The judges of the second contest were Dr. P. Mabel Nelson, head of the Nutrition Department of the College of Agriculture, Ames, Iowa; Miss Dorothy E. Shank, director of the Research Kitchen, American Stove Company; Miss Marion Sawyer, Detroit Free Press; Miss Grace McAllan and Miss Roberta Hershey of Michigan.

In reporting for the judges, Dr. Nelson said that too often cakes tasted of spice, citron or raisins; that they were overbaked or too breadlike; decorations were overdone. These points must be brought in line if the

cakes are to be on a par with those high class samples which are usually found in a contest of this kind.

The cookies are often too stiff, overbaked or the chocolate too pronounced. Candy too much flavored, too granular, either too hard or too soft. \* \* \* \* \*

Many of the specimens of the second National Contest were excellent and the committee congratulates the winners on the quality of their product. — o —

Miss Dorothy Shank, American Stove Company.

We must seek better standards in baking and flavor. — o —

"The Need of Research in Honey Cookery"—Miss Mercedes Cranston, assistant secretary American Honey Institute.

Tested honey recipes are needed to create a market for honey, to break up the staid uses of honey, to meet competition of other things like corn syrup, maple syrup, etc. \* \* \* \* \*

Women will not take the time to develop these things. It must be done in some place like the Institute kitchen. The development of tested recipes gives the beekeeper selling points. \* \* \* \* \*

Homemakers fail to use honey because it is not sufficiently advertised and also there is a limit in supply. It is often too expensive; they do not know how to use it as well as they know how to use sugar. Beekeepers must inform themselves of the uses of honey or they cannot be enthusiastic for honey. — o —

This report will be continued in the December number. There is quite a bit more.

## Fifty Per Cent Crop in Utah

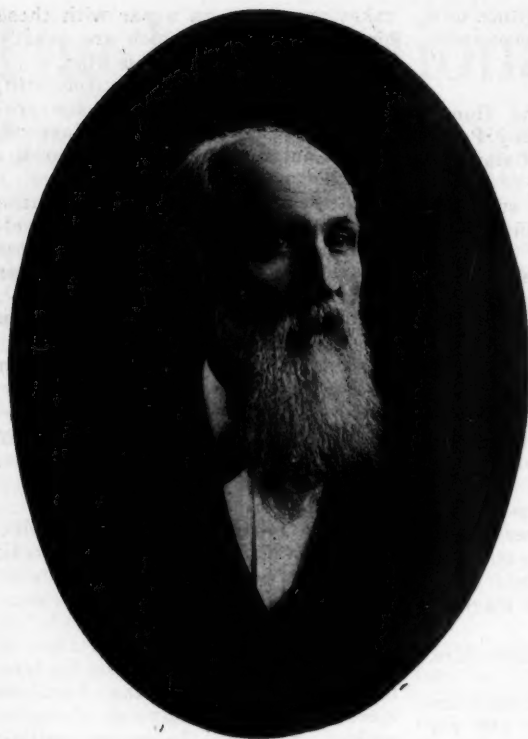
Only a fifty per cent crop is anticipated in Utah this year due to a dry season. According to Mr. Stone, of the Superior Honey Company, the crop is short in both Idaho and Utah, although it is of high quality.

Glen Perrins,  
Utah.

## Chocolate Coated Honeyed Dates

Stone dates, taking care to preserve form by slitting down one side with a paring knife and removing the stone. Fill the stone cavity with crystallized honey. Press closed and dip in chocolate. A piece of walnut may be added to the honey center for variety. To facilitate handling honey keep fingers and spoon moist with cold water—this prevents honey from sticking.

Miss Davison.



# Lives of Famous Beekeepers

By Kent L. Pellett,  
Iowa.



## COL. O. O. POPPLETON, 1843-1917.

Poppleton was the first successful migratory beekeeper who became well known to the readers of bee magazines.—Frank C. Pellett.

COL. O. O. POPPLETON went home to Iowa after the Civil War with a good record, including five years of service. He also went home with impaired eyesight and health so broken that he never fully recovered.

Poppleton married a widow who also was in poor health. The rigors of the Iowa winters were not suited to them, so they took their bees and went to Florida, where by living in the sunshine they obtained reprieves in their illnesses, and where Poppleton became the first migratory beekeeper of note in America. He wrote occasionally for the magazines, telling of his success at this kind of beekeeping, of his delight with life in Florida, and on many common problems of the beekeeper, for he was a careful student of all phases of apiculture.

Oscar Osgood Poppleton was born near Green Springs, Ohio, in 1843. His father died a few years later and left his mother without money. She married a Joseph George. Tales drifting back from the West lured them to northern Iowa, where they settled in Chickasaw County the year Oscar was twelve. He went to the country school, and for two years took a business course at Oberlin College. When he was sixteen and seventeen years old he and an uncle taught writing school at several places in Ohio. Before he returned home he kept books for a time in a newspaper office.

The Civil War came. Poppleton enlisted as a private in the 7th Iowa Infantry in October of 1861. His service in the next two years won

him the commission of Lieutenant of the 111th U. S. C. Infantry. A few months later he became regimental adjutant. He performed these normal fulltime duties beside acting as post adjutant at Murfreesboro, Tenn. This overwork wrecked his health, although during the years of service he was not wounded. He was taken captive one time, but had the good luck to be exchanged by the Confederates a few weeks later.

When Poppleton was mustered out he settled on a farm near his parents to try to piece together the broken threads of his life. He married a Miss Groom. She bore two daughters, and died after twelve years of married life, being an invalid most of the time. In 1881 he married a widow, Mrs. Mattie Herrick, also an invalid.

It was at the time of Poppleton's first marriage that his stepfather gave him a colony of bees in a box hive, and he undertook his first beekeeping. But he made little of his bees at first, since he had heard nothing of the modern methods.

A few years later, in the winter of 1869, an acquaintance who had a copy of the Beekeepers Magazine, published by H. A. King, stayed with Poppleton overnight. Poppleton read it from cover to cover, and for the first time learned there was a literature on bees, and that there were movable frame hives. He transferred his colonies into the movable frame hives and in a year or two he had a large apiary, only to have his bees destroyed by that bugbear of the early Iowa beekeepers—bad wintering. He started over again, and

solved the cold weather difficulty, so far as he was concerned, with chaff hives. He was not well enough to carry on a large business, but he built up between seventy-five and 150 colonies, and over a period of ten years could boast of 110 pounds of honey per colony. Later he said that he had produced 50,000 pounds of honey in a season in three locations, Iowa, Cuba and Florida, so he must have kept bees on a fairly large scale.

He adopted the single story "New Idea" hive of D. L. Adair, which was put on the market about that time, making it over to suit his own needs. As Poppleton used it, the frames were square, 11½ inches each way, and twenty-five of them could be used in one hive. He called it the "Long Idea" hive. This hive he used all his life, and wrote that he preferred it above all others. The hive could not be blown over by the wind, being all in one story, and one did not have heavy supers to lift, since the frames full of honey were taken out one at a time.

Poppleton took his Long Idea hives with him when he and his wife moved to Florida in 1886. They located at Stuart. He was soon writing letters about the benefits of sunshine to people in ill health. Two years later he went to Cuba and took charge of 500 colonies of bees for M. Dussac at Havana. He got large crops for Dussac the two years he managed his apiary, reporting 52,000 pounds of honey from the 400 colonies the second winter. Dussac's hives were in two stories. Later Poppleton said

(Please turn to page 538)



# What Is Necessary for Good Wintering

By V. Raykovsky,  
Russia.

**B**EESKEEPERS are not agreed upon this question. Some favor wintering in the cellar, others prefer wintering in the open air whatever the climate. The latter are divided between those who use wintering cases and close up the hives as much as possible and amateurs who use double-walled hives, and still others who think the bees winter well in ordinary hives with walls an inch or so in thickness provided the apiary be located in a spot sheltered from the coldest winds.

This diversity in the methods of wintering shows that they all have good points and that the real cause of good wintering is to be found in something else; that bees in good health may support much cold provided they are supplied with indispensable things, good ventilation and enough food of good quality. This is confirmed by the fact that bees often winter well in the most rigorous climates of the North, even in thin hives and require only a few preparatory conditions that capable beekeepers know how to provide.

Theories do not give us sufficiently clear explanations on this matter. They only seek to explain that bees, like most living beings, require only sufficient heat and food to keep up the condition of their bodies. Some hold that the mass of food should be so large, when they winter in the open air, that their abdomens should be filled during the cold weather in a rigorous climate.

In fact we witness the opposite. More than thirty years ago one of the Swiss experimenters, Dr. Kramer, after ten years of careful experiments on wintering in the open air, ascertained that, during soft winters, the bees consumed twice as much food as in hard winters (Rucher Belge 1907, No. 3, page 57). The same thing has many times been reported by other experienced beekeepers. But the theory remains the same. It does not take notice of the fact that the cluster of bees in winter presents a phenomenon which upsets all the calculations upon the food needed to keep the bees warm under the influence of cold.

During severe winters the bee cluster becomes so compact that it may be compared to an independent organism of which the bees may be compared to cells which supply all their force and their faculties, to

receive in exchange the ability to fight more the extreme cold and economize the supply of food within the reach of the colony.

Theory teaches us that the best condition for the wintering of bees is that in which the group finds itself at its first stage of development, because it then needs less food for the wintering of the bees. But practice shows us that as the group becomes more compact, the bees, in spite of the increase of cold weather absorb less food owing to their group being more porous. This phenomenon is not yet well explained, but the practical beekeepers are well aware of it and utilize it with great profit.

My own experience upon the wintering of bees in the open air has convinced me that the bees do not consume more supplies in the open air than in the cellar, even in hives with plain walls. In very cold weather they keep in very compact clusters, do not vibrate their wings, make no humming and hold themselves as quiet as if they were dead and this sometimes lasts several months. But at the first days of spring, the situation changes entirely. Everything begins to move and the colony shows itself in perfect health. Their abdomens are small, thin, and this is the best proof that they have not eaten much.

For good wintering in the open air, the bees must not be too old or sick; they must not suffer from the want of ventilation, the supplies must be very ripe and well located in the hive. A sick bee leaving the cluster to die, or dying within the cluster, may be compared to a sick cell in a body which may be damaged by its presence.

The hives with single walls need a good protection against cold winds during the entire season, but especially in winter. The Dadant or Modified Dadant hives, with double walls, winter well without much protection against winds. But the Langstroth hive, owing to its small size, is not so good for winter, even with a food chamber, as the storage room is separated from the main body by the top and bottom bars of each chamber and the space between the two stories, which hinders the compactness of the cluster.

[The only point in which we cannot agree with our Russian correspond-

ent is where he states that bees in outdoor wintering do not consume more than bees in the cellar. We find that, in hard winters, bees that remain in cold locations consume much more honey than bees in the cellar.—Editor.]

## Red Cross Farm and Home Safety Campaign

On October first, the American Red Cross launched a nation-wide program to eliminate unnecessary accidents in the farms and homes of the country. Every Red Cross chapter will play a part, thus insuring contact with all rural communities. Inspection of individual homes to eliminate accident-causing hazards will be made. School children will be given a list of the most common home hazards, asked to enlist the cooperation of parents or relatives in removing each.

The active cooperation of social, civic, educational and other groups is being secured; many have already pledged their aid. County agents and others will be invited to aid in accident-proofing the farm and work on the farm. The Red Cross inspection blank will be distributed by cooperating organizations to homes where there are no school children.

This new Red Cross program is being launched because last year, in the United States alone, 34,500 persons were accidentally killed in the home; 150,000 were permanently crippled; millions were temporarily disabled. More people were killed accidentally in agricultural pursuits than in any other occupation. According to experts, almost all of these accidents could have been prevented.

The Red Cross feels that there is a definite need for its services in the field of home-accident prevention. Because of its nearly 13,000 chapters and branches, the organization has a unique opportunity to successfully promote a project of this nature. This is especially true in the field of farm safety, where, because of the inaccessibility of many farms, little safety pioneering has been done by comparison.

Other agencies now active in the accident-prevention field point to the fact that, because of its many units, with their knowledge of local factors and opportunities, a Red Cross accident-prevention campaign would be equally effective in all communities.

Accident prevention is a natural outgrowth and by-product of Red Cross instruction in first aid, a service initiated some twenty-five years ago and responsible annually, for saving many lives and preventing minor accidents having major consequences.



A typical stretch of upland country. Flocks are numerous and invaluable to the production of white clover—both cultivated and wild.



A hillside farmstead.

## A Glimpse at Cotswold Bee-Gardens

By A. H. Bowen,  
England.



OLDSTYLE bee craft still has its adherents, and in Gloucestershire where husbandry is prominent there are many quaint examples of the skep bee-garden. Unnoticed unless perhaps searched for, you will find interesting examples of a system which allows the bees full scope in carrying on in their own sweet way.

In the hollows and little valleys which intersect the wide uplands are clusters of cottages, a farmstead or two, and the church. Here, the keeper of the village shop, the shepherd who tends the flocks on the hillside slopes, and such like folk are those who find in a few skeps a pleasant pastime providing generally some honey for winter use within the family and a little to sell.

After the flowers in the cottage gardens have faded in spring, meadow blossoms continue to yield until the limes wind up the season, unless there is willow-herb or cranebill in the spinney. The bee-garden of Mr. Stal-lard, Colesborne, is a typical one. Keeper on a large estate, he takes a

pride in the cultivation of old-fashioned flowers such as the bees love, and at the close of a long hot day the scent of newly stored nectar is infinitely strong. Here the bees swarm and fill their sweet fresh combs with charlock honey, yellow as a buttercup. Here the hives and their straw "caps" grow heavy, until the shortening days denote the time when they shall be weighed and singled out for "taking up."

No matter if the honey is a little pungent from the admixture of pollen. It is no less wholesome on this account, and nearby cottagers are glad to bring their jars along for a supply of what no good household would like to be without in winter-time, as well as slab of virgin comb for table use.

Within sound of the trickling brook and under the shade of a thick set yew, the Rectory bees, near Stow-on-the-Wold are happily ensconced.

Warmed by the early spring sunshine and sheltered from the breeze, few skeps are ever lost from the

modern complaint of spring dwindling. And as the church bells chime out on the first hot Sabbath morning in May, the waiting bees leave the cluster beneath the stool and take to the air with a glad hum. The safe



A prime swarm settling down.



hiving of the first prime swarm of the season is a token of well-being in the bee-garden.

In a season upset by constant thunderstorms, the bees are said to be restless. They swarm and return without settling. Once in a while they fly straight to the woods without warning. But happenings of this kind are the mere result of weather vagaries. Prime swarms are given largish hives with flat top and hole to accommodate a "cap" later on. Two or three cross sticks support the weight of honey to be collected. Casts are hived in smaller dome top skeps, as is also the humble "smart."

Acting on the old adage that "A swarm of bees, in July is not worth a butterfly" late casts are joined to already established lots to help the queen in producing a lusty population to outlive the winter.

Such late swarms are invariably amongst the strongest in springtime. Sometimes, when the bottles of stale beer have failed to trap the local wasps, the denizens of a nearby nest raid the queenless bee skep. This is the signal for making up a plaster with which all the other hives are sealed to their stones, except a tiny hole as doorway for the bees.

Then the wasps turn their attention to the ripening fruit, and to the honey draining from crushed comb in the cool kitchen.

In the round of the bee year there is a sequence of operations attended to with unflinching care.

In case of food shortage, in spring, a little is given at the mouth of the hive on sunny days. Later on, the skeps hanging in the "tallif" are taken down, cleansed and "dressed" to render them sweet and wholesome.

Then the date tags are attached to the hives as they are filled with swarms. Later on there is the sulphur match and pit to prepare, unless some neighboring "expert" is sent for, to drive and fetch the bees away.

From the sweet combs a cask of metheglin is brewed and perhaps a few pounds of wax cast from the rendered comb.

And there is usually no lack of purchasers for the honey from not only the village folk but those also who wander into the hamlet from the highway and seek to capture something of the spirit of this unspoiled countryside.

## Cause of Swarming

We are in receipt of a pamphlet of thirty-two pages printed by the Rothamsted Experimental Station at Harpenden, England, entitled "The Cause and Control of Swarming in Bees."

The pamphlet is a reprint of articles and lectures given before the Rothamsted Conferences on this subject.

Miss Annie D. Betts reviews the historical notes on theories of swarm control, and other features are a description of the Gerstung's Brood Food Theory by Brother Adam, articles on swarming and swarm control by D. Morland, M.A.; L. E. Snelgrove, M.A.; W. H. J. Prior; C. F. Clay, M.A. and W. Hamilton. To anyone who is interested in the various theories on swarming and swarm control, the pamphlet will be extremely interesting. The cost of the pamphlet is one shilling, six pence. It can be obtained by addressing the Rothamsted Experimental Station.

## Beg Pardon, Mr. Moore

F. L. Huggins, Wilmington, North Carolina, says "I was surprised to see the picture of Greenfield Lake in your August number with no reference to what it was. Mr. Moore, manager of

the Chamber of Commerce of Wilmington, who gave it to me, naturally expected you would say it was part of Greenfield Lake, Wilmington, North Carolina. I trust you will mention this."

Our mistake entirely, Mr. Moore. At the time of making up the page there was no mark on the original photograph to denote source and consequently the error was committed without any intention of slight. Mr. Huggins sent this picture which appeared on page 372 of the August issue, at the top of the page containing the article by M. G. Dadant discussing the question of the effects of soil in honey production.

So let us say right here to our readers that this picture is of Greenfield Lake, Wilmington, North Carolina, furnished through the courtesy of Mr. Moore, manager of the Chamber of Commerce.

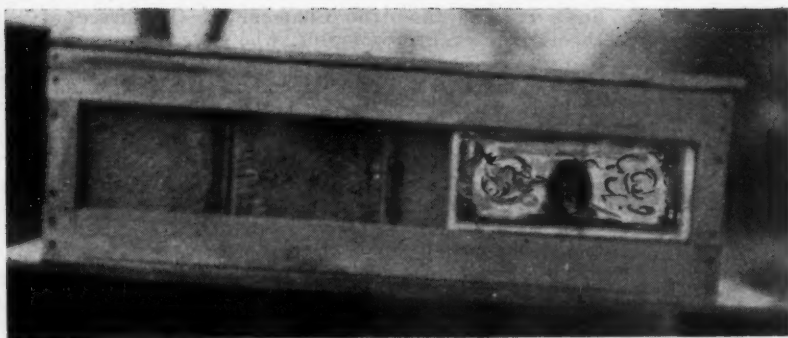
## Attention, Association Secretaries!

LEROY STOCKDALE, Secretary-Treasurer of the Cook-DuPage Beekeepers' Association, in Illinois, is standing by his sky-scraper to show that he knows how to produce a crop as well as carry on the affairs of one of the most active local associations in Illinois. The lower picture shows Mr. Stockdale's well kept and interesting apiary.

The Cook-DuPage Association does things. In October, they held a Halloween party and supper for the Association and did the crowd come out!

The old-fashioned talky-talky meeting is going out of date and the new kind of entertainment, demonstration and instruction program is coming in now to gather up the big groups.





Magarity went around paying people a dollar a case to take his honey and so relieve him of the work of selling it to them. It was as if he had pasted a dollar bill on each case.

## Nobody Loves a Price-Cutter

By Walter H. Hull,  
Virginia.

**I**N a Market Letter of the Department of Agriculture appears the laconic statement: "... occasional price cutters are found."

That is not news. We knew before that the price cutter was in our midst. Most of us have seen him, stumbled across his trail, called him hard names: A sheep in wolf's clothing; A polecat with an inferiority complex—and the like. We can name the grade of his produce and the style of package he uses, and also the amount of money he is presenting to the buyer with each case of goods, we are that well acquainted; and naturally enough, since he is frequently a neighbor—perhaps a good neighbor and a good fellow.

His desire to be considered a good fellow may be one cause of his price cutting. From the very nature of his business the beekeeper works a great deal alone. His circle of acquaintance is small, his contacts few. The outside world, when he ventures out to sell his product, is more or less strange. Being a friendly fellow he is anxious to make a good impression. And by selling at a cut rate he often succeeds. This is an actual fact. The statement that nobody loves a price cutter must be qualified. No one in his own field loves him, but there is a type of merchant, who while deeply resenting the price cutter in his own line of business, has a genuine regard for the producer who sells to him at a cut rate—and a very real resentment toward the one who sticks for a fair price.

The cut rate producer in such a case is not a business man, he is just a man craving friendship; and he actually does buy friendship of a sort, paying for it in effect in hard cash. It is bad business because in so doing he shuts himself off from old friends.

Another cause of price cutting may

be plain laziness. I know two beekeepers whose names are not respectively Magarity and McGuire, but those names will serve. Magarity produced a crop of fine section honey, while McGuire raised some pretty good honey, but not equal to Magarity's. But note this. McGuire sold his honey at \$4.00 per case. Magarity working in the same territory and selling in the same manner, charged only \$3.00 per case. Both were sold out within a few weeks, from which it is evident that Magarity could have sold out with no trouble if he had asked \$4.00 for his product. Its superior quality would have given him the advantage even then.

To be sure, he might have had to work harder. What he actually did, although probably without realizing it, was to pay his customers a dollar a case to take the honey and thus relieve him of the work of selling it to them. He did this as definitely as if he had pasted a dollar bill onto each case.

There is an aspect to this type of price cutting that is generally overlooked. Take the case of the man we will call Wendell, because that is not his name. Wendell's wife helps him with the bee work; and she is a real helper. Without her assistance he would have to hire a man during the active season. He does not pay her anything, although she does the work in addition to her own. Not that she wants any pay—she wants to help him get ahead. But the fact remains that by doing this extra work she saves him the expense of hiring outside help, and in any fair accounting should be entitled to the amount he would have to pay a hired man. In other words, the money belongs to her, although she may choose not to collect it.

With this in mind, note what happens when Wendell goes out to sell

his crop. The first place where he has a chance to make a sale is at Hobbs' market. Hobbs is a good fellow. It would be too bad, thinks Wendell, to drive a hard bargain with a man like that. Hobbs might think he was grasping. And, anyway, he has stopped at two places already and has not made a sale. It's going to be hard work, this salesmanship. So Wendell cuts his price, paying Hobbs a dollar a case, or whatever the amount may be, to relieve him of further work in making the sale.

The serious fact is that the dollar he thus gives over so lightly is not his to give. It belongs by rights to his wife in return for her work, since if she had not helped him he would have had to pay out the money for help. The man who takes money that his wife has earned by hard work and uses it to save himself some of the work of selling his crop cannot be called very much of a man. The best you can say for him is that he doesn't know what he is doing, which is a mighty weak excuse. Some men are undoubtedly too hard in driving a bargain, but it is just as bad, or worse, to be too soft, and just as apt to bring heartache and privation where it should not be. That is the price cutter's weakness. He is too soft.

But saying that does no more good than calling him hard names. What we want is a cure. And there is no cure. The government has undertaken to prescribe remedies, but even where the industry has succeeded in applying them they have not been entirely successful. They fail because they do not touch the problem of the producer who has failed to make the grade in salesmanship. They squeeze him, sometimes so hard that he is forced out of business. But that does not solve the problem, either; it merely switches it onto another track. We cannot afford to drive efficient producers out of business.

While there is no positive cure for the evil there are remedies that will ease the pain. When salesmanship cannot be injected into an efficient producer the obvious thing to do is apply it externally. It is here that the producers' associations have their big opportunity, especially the regional, state, and local associations. The smaller they are the better their chance of success, because there will be fewer complications.

Any live local association should have no trouble in finding means to buy up all honey in its territory that is offered at less than a fair market price. I am not talking about the usual cooperative plan where the association undertakes to handle all the produce of its members and the members are forbidden to sell elsewhere. Under that plan the association has to offer the highest possible price in order to corral all the producers. Under this plan the price



would be put at the bottom of the price range rather than at the top, the object being to serve only those producers who, for any reason, were unable to get a fair price in the open market—the price cutters.

Where an association did not choose to go into the venture officially any group of members could form a pool for the same purpose, and perhaps with an even better chance of success, since the members of the group would be hand picked with that object in view.

This is no vague theory. The plan is practiced by hundreds, probably thousands, of individual beekeepers who buy honey from their neighbors whenever it is offered at what they consider below the market price. It is practiced on a vastly larger scale in all the big wheat and other grain markets. It is in fact the natural, logical remedy for the price cutting evil that less than two years ago was threatening the whole beekeeping industry with disaster and that is in abeyance now only because of two successive short crops.

It may be argued that an association or group of individuals would be taking too much risk in buying up honey in that manner. The argument does not hold water. If their judgment was sound in regard to prices the possibility of loss that is present in all business transactions would be offset by an equal possibility of gain. And, in any case, if they could not trust their own judgment to that extent they would scarcely be justified in expecting the other man to risk his money by holding out for the higher price.

In refusing to buy the price cutter's crop, or even in neglecting to do so when we might with a little effort raise the means, we are in effect giving him a clean bill of health, admitting that his judgment in regard to market conditions is at least as good as ours, and possibly better. That is what it amounts to, isn't it? And thousands of us are guilty, even while we cry to high heaven in protest.

## Supers— More or No More

Supering has had me guessing this season. I would decide that no supers were needed, if these bees fill what they have by the end of the season I will be lucky, then I would rush to a yard where I knew the hives must be overflowing and find them in the same condition.

A week or so later I would visit the first yard with a few supers and find everything dripping and practically every colony crying for room. I have quit trying to guess what kind of weather will produce a flow. The little weather I thought ideal for a

flow proved to be a dud and the weather I thought bad proved to be good. Recent hot dry weather has produced a good flow even when plants seemed to be drying up. White clover was everywhere. Fields were white with it but it produced little compared to the bloom.

This year the flow started slowly because of bad weather and is winding up with a bang. It usually starts with a bang and winds up slowly. Is it possible that this is what happens in the North, causing the bees to fill up the brood chamber with honey?

Now for some questions. Do bees learn to rob early in the season and never forget it even during a heavy flow? Does this robbing make the bees reject introduced queens? Is it this condition that causes many northern beekeepers to complain of trouble in introducing queens when here I seldom have trouble?

Geo. Harrison,  
Virginia.

## Clover Seed Crop

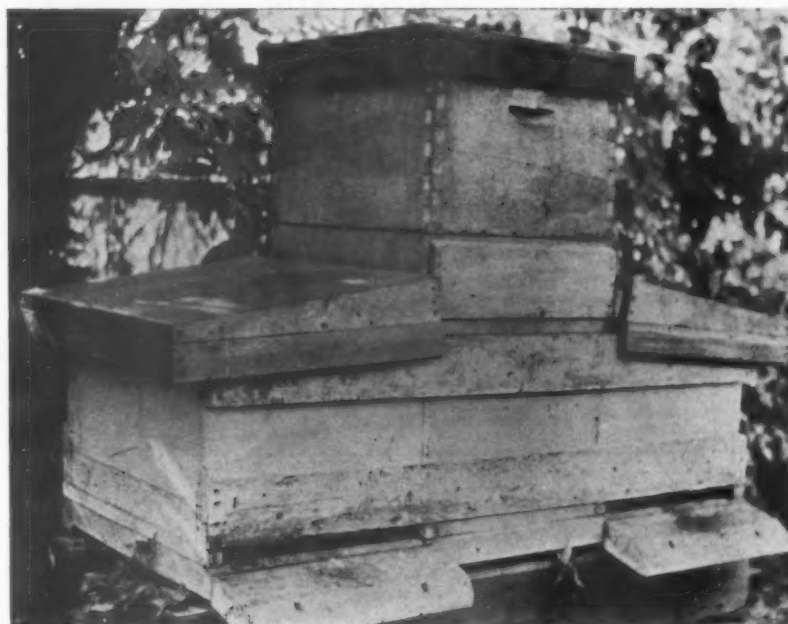
A September report by the U. S. Department of Agriculture, at Washington, D. C., states that the sweet clover seed crop for the 1935 season will be one-third larger than it was in 1934, which was the smallest on record. However, red clover production seems to be lower.

The main producing districts for sweet clover are Minnesota and the Dakotas, with Ohio, Nebraska and Kansas in the second group, and Iowa, Illinois, Michigan, Colorado and Montana also important.

Dutch white clover seed production this year will be about one-third of last year, the main crop coming from Louisiana, Idaho and Oregon, with some production in Wisconsin.

Crimson clover will probably be a bumper crop and alsike somewhat near the same.

## Double Colony With Center Storage



THIS is a double colony with center story used by Otto Harpold, near Clinton, Indiana. The entrances which show on either side in the picture are entrances into the two colonies. The bees pass from these two hives, through queen excluding zinc partitions, into the center to store honey from there on up through the supers which are put on top in succession in the usual way for extracted honey production or for comb honey production.

In the center section Mr. Harpold

sometimes uses multiple section carriers producing between 90 and 100 sections of honey in the center part between the two colonies. This is an unusual type of hive not well adapted to moving but serving for a let-alone system of beekeeping.

The bees store well for winter, do not swarm as readily because of the great amount of room and the queens are working constantly to supply the bees for the double colony. The picture shows the outside details of the hive.



## Tar Paper Wrap Catches Winter's Sunshine

IN these three pictures are shown the details of a simple tar paper wrap and how it is applied. The first picture shows a Modified Dadant hive elevated on runners with 2x4 inch blocks at either end of each runner to take the hive up about four inches above the ground. The tar paper is slipped underneath the elevated hive and cut off in the desired length from the roll.

— o —



Now the hive is lowered to the ground on top of the paper which, as you see by the first picture, is slipped directly under the runners and under the hive so that when the runners are removed, the hive rests on the paper and directly on the ground. Then the hive is in a position to fold the paper up around the sides and top just as you would wrap a bundle.

It requires a good grade of building paper, one which is not apt to tear or become brittle in the cold and offering some chance to set the wrapping aside for use from year to year.

— o —



At least for the Modified Dadant hive, the paper is not wide enough to be folded over front and back and entirely cover the surface so extra pieces are cut and folded to cover over the original large bundle fold and entirely fill the front and back spaces which were left open. Then the slats shown in the picture are tacked across the front, the back, and on the far side where the paper extends down from over the top onto the side. The side slats do not show in the picture.

Some beekeepers in the North use this kind of a wrap with a top entrance, shutting the usual summer entrance tightly, a method which is gaining favor in northern bee yards in the place of the cellar. In addition to the tar paper, straw or other material may be used next to the hive underneath the paper. It costs about from 15-20 cents per colony per year including labor to wrap the bees in this way. Two men can do the work with ease and rapidity.

—G. H. Cale.



## Prize Winning Recipes 1934 Illinois State Fair

### Honey Ginger Snaps

- ¼ cup honey
- ¼ cup sugar
- ¼ cup butter
- ¼ teaspoon soda
- ¼ teaspoon ginger
- 1 ¼ cups flour

Mix well. Roll thin, cut and bake in moderate oven 15 to 20 minutes.

### Honey Date Bars

- 2/3 cup flour
- ½ lb. dates
- ¼ teaspoon salt
- ½ teaspoon baking powder
- ¾ cup nuts
- ¼ cup honey
- 2 eggs, well beaten
- ¼ cup sugar

Cream honey and sugar. Add eggs, sift dry ingredients dates and nuts floured. Spread thin on cookie sheet and bake.

### Honey Muffins

- 2 1/3 cups flour
- 3 tablespoonfuls honey
- 4 ½ teaspoonfuls baking powder
- 4 tablespoonfuls fat
- 1 teaspoonful salt
- 1 cup sweet milk
- 1 egg

Mix well and bake in muffin tins. Serve with butter and honey.

### Honey Oatmeal Gems

- 3 cups flour
- 1 cup seedless raisins
- ½ cup sugar
- ½ cup shortening
- ¼ teaspoon soda
- 2 level teaspoonfuls baking powder
- 3 cups oatmeal
- 1 teaspoonful vanilla
- 1 cup honey
- 1 ¼ cups sweet milk
- 1 cup nut meats

Cream butter, honey and sugar together thoroughly. Add milk mixed well. Sift flour once before measuring. Add flour sifted at least 2 times together with other dry ingredients. Add oatmeal and nuts mixed together. Chopped raisins and lastly vanilla. Pour in well greased muffin tins and bake in hot oven 20 minutes.

### Honey Nougat

- 2 cups sugar
- ½ cup honey
- 1 cup syrup
- 5 tablespoonfuls nougat cream
- ½ cup water

Cook sugar, syrup, and honey together to 270° F. Remove from fire and stir in nougat cream. Add fruit and nuts. Mould in buttered pans. Cut and wrap.

### Honey Divinity

- 2 cups sugar
- 1/3 cup water
- 1/3 cup (light) honey
- 2 egg whites
- Pinch of salt

Boil together sugar, honey, and water until syrup spins a thread when dropped from spoon (about 250° F). Pour syrup over well beaten whites of eggs, beating all the time until mixture crystallizes. Drop in small pieces on wax paper or buttered marble. Place ½ nut meat on each piece if you like.

Mrs. Rutha King,  
Illinois.

## Comment on Resistance

I have been reading your articles on resistance to American foulbrood with much interest, since I have had my full share of that disease. Our trouble today is that we have a weak

race of bees; but I believe a resistant strain can be bred.

Of a few colonies of my bees that had American foulbrood this season, two showed resistance. I used these as breeders and requeneed all colonies. I burned one colony which failed to mate a queen. Today all have recovered. Will American foulbrood break out again in these colonies? Next season will tell; but I doubt that it will.

This strain is a cross between Italians and Caucasians. I think the most resistant one would be the third cross between the two races.

I find that I have no more foulbrood by treating than by the fire method. There is so much foulbrood in my locality that it will come back more or less anyway. Treatment is the cheapest method, of course. I take great care in preventing robbing and I do not interchange combs any more, as I consider it poor beekeeping. I have high hopes of bringing American foulbrood under control.

Louis F. Cox, Missouri.

## Comb Honey in Jars



The sales-getting display value of the glass container for strained honey has long been recognized by packers. Now T. W. Burleson and Son, Waxahachie, Texas, has gone a logical step further. "If display in glass and the suggestion of purity and protection supplied by the glass jar will sell strained honey," they say, "why not put these merchandising advantages to work for comb-honey as well?"

The illustration shows the attractive stock containers supplied by the

Owens-Illinois Glass Co., Toledo, which takes care of the packaging requirements for "Burleson's Pure Honey," both strained and comb. Correct label design gives maximum display space to the contents of the jars. In addition to the other merchandising attractions many housewives will see a re-use value in these attractive containers. The C. T. closures for the large jar and the pail were supplied by the Closure Service Company, Toledo, a division of Owens-Illinois.

## FROM THE LITTLE BLUE KITCHEN



By Lida Keck-Wiggins

**W**ITH the snappy weather now here, piping hot food makes an appeal to all appetites. It is very important to start the day right. One of the best ways is to serve a breakfast so good that it will be thought of with pleasure all the day through.

One mighty good breakfast dish is the Honey-way Waffle. We have all made waffles for years without sweetening, but by experimenting Honey Lady finds that the cakes are more likely to have that lovely light brown, crispy appearance if honey is added to one's regulation batter.

- 2 cups flour
- 2 teaspoonfuls baking powder
- 1 teaspoonful salt
- 3 tablespoonfuls butter
- 1 1/3 cups milk
- 2 tablespoonfuls honey
- 3 eggs

Blend the butter, honey and salt with the eggs, well beaten beforehand. Sift the dry ingredients together. Then into the liquid mixture add, alternately, the flour-baking powder mix and the milk until batter of the right consistency has been made.

— : —

On Thanksgiving Day cranberry jelly will be a nice change from just plain cranberry sauce. Besides, if you make up a batch of it a few days before, you will have glasses of it on hand to serve with cold turkey or chicken for Sunday night suppers later on. Here's the true inwardness of

### Cranberry Jelly

Equal parts cranberries, honey and water. Cook berries in honey and water until skins grow soft. Remove berries with a holey spoon. Then boil the honey and water syrup down until you have just enough left to cover the amount of fruit removed. Then pour into jelly glasses or other containers. Let cool and seal with paraffin. A mold or two of this jelly will look well on the Thanksgiving Day table.

— : —

And now for the honey folk who like to make their own candies with honey. Here is something really good, and these bits of sweetness are fine to munch on when reading in the

evenings before the early autumn fire, or at any time one wants to cater to a sweet tooth.

### Chocolate Honey Caramels

- 4 squares unsweetened chocolate
- 2 cups sugar
- 1/2 cup strained honey
- 2 1/2 cups thin cream
- 4 tablespoonfuls butter
- 1 teaspoonful vanilla, lemon or almost any flavoring

Break up the chocolate into small bits, then place it and everything else except the flavoring extract in a kettle over a low flame. Stir all the time until it forms a firm, but not hard, ball when tested in cold water. Remove from the stove, add the flavoring and pour into a greased pan of a size that will allow the candy to be cut about one inch thick. After the candy has cooled cut into squares; wrap in waxed paper.

Here's another way to make caramels with honey. It's called simply

### Honey Caramels

- 2 cups granulated sugar
- 1/2 cup cream
- 1/4 cup honey
- 1/4 cup butter

Mix all together. Then heat and stir till everything is dissolved. Cook but don't stir in this case, until the firm ball is achieved when you test in cold water. Beat until the mixture crystallizes; then pour into greased pan (using butter to grease).

— : —

### Honey Baked Beans

Now that baked beans taste good again since there's a tang in the air to bring out their flavor, why not try this recipe with honey?

Take a 2-quart bean pot. Small pea beans are the nicest. Place 1 1/2 pounds of these to soak over night. In morning pack into the pot, adding 1 teaspoonful of salt; 2 teaspoonfuls sugar (brown preferred); 1 teaspoonful dry mustard and 1 tablespoonful of honey. Mix with a long spoon. Then cover with hot water, and over the top place a goodly sized slice of fat salt pork. Bake all day, seeing to it that the beans are always cover-

ed with water; also keep a cover on pot constantly.

— : —

Incidentally here are a few bee lines to delicious turkey dressing when one hankers for a change.

1. A cup of cooked sausage added to a stuffing of bread, onion and celery seasoned with salt, pepper and poultry seasoning is delicious.

2. Half a cup of chopped, cooked prunes, mixed with 2 cups of bread crumbs, salt, pepper, cinnamon and allspice, and moistened with melted butter, 1 tablespoonful lemon juice and 1/4 cup of water in which prunes were cooked.

3. Orange juice gives a delicious piquancy to a stuffing made of bread crumbs, chopped onion and sausage.

## Agriculture in Portugal

We have just received a bulletin from Portugal giving the actual state of apiculture in that country. It is a copy of an address given by Luiz Quarten Graca at the 1935 International Congress of Beekeepers at Brussels.

In the booklet is the resume of government activities, of beekeepers' associations, regional commissions, etc., as well as the prevailing climatic conditions in Portugal, the various flora, the races and enemies of bees, report on movable and immovable comb hives, different kinds of honey production.

Particularly striking is that in Portugal there are no bee diseases, and the author lays this to the use of native races mostly of the grey or dark bees, which are more resistant, according to him.

Four hundred and eighty-five thousand box hives are reported in Portugal as against fifteen thousand movable comb hives of various types.

The average production from movable comb hives is about thirty pounds a colony.

Accompanying the circular is a map of beekeeping in Portugal and several photographs of representative hives and apiaries.

## Queenless Colony Below in Uniting

In the past, whenever I united colonies it was my practice to place the queenless colony on top. Invariably this resulted in fighting and the spoils of battle were in front of the hive.

Last summer I changed the method and now the queenless colony is placed on the bottom, with very good results and practically no fighting.

A. J. Van Rossum,  
Minnesota.



# American Honey Institute NEWS NOTES

## Membership Honor Roll

THE membership Honor Roll of American Honey Institute will go to press the 31st of December. Beekeepers who have not yet sent in their memberships for 1936 should do so before this date in order to have their name included.

Previously, beekeepers whose memberships have been received after the printing of the Honor Roll have complained they did not know the deadline date.

Remember that a copy of this Honor Roll is enclosed in every set of material going out from the Institute which means direct advertising for the beekeeper.

## Honeyway Banquet at International Convention

At the annual International Convention at Detroit, October 7 to 10, the annual banquet was a honeyway banquet. With the general course, honey hunks were served through the courtesy of Mr. Hilbert of Michigan. The fruit cocktail preceding the menu was sweetened with a sauce consisting of a third cup of lemon juice flavored with one cup of honey.

The complete menu was:

Fruit Cocktail  
Cream of Tomato Soup  
Roast Turkey Mashed Potatoes  
Gravy  
Rolls Buttered Peas  
Honey Hunks  
Head Lettuce with Piquant Dressing  
Honey Ice Cream with  
Betty Crocker's Honey Choc. Cake  
Coffee

## Cream of Tomato Soup

Use your favorite recipe, omitting any sugar that may be called for. After removing from fire add 1 cup of honey for each 100 cups to be served or if making for the family, use 1 teaspoon of honey for each cup of soup to be served, or 1 tablespoon for each six cups served.

## Roast Turkey

Proceed as usual and when the turkey begins to brown, reduce the heat to 350 degrees F. and baste occasionally with 2 cups of hot water mixed with  $\frac{1}{4}$  cup of honey. Turn the fowl so that it may brown evenly and allow 20 to 30 minutes to a pound.

When ready to serve, brush again with  $\frac{1}{4}$  cup melted or soft butter mixed with 2 tablespoons of honey.

## Buttered Peas

1 teaspoon of honey allowed for cup of peas. See page 28, "100 Honey Helpings" for full directions.

## Head Lettuce With Piquant Dressing

Use Honey French Dressing recipe, page 27 "100 Honey Helpings." Rub bowl with garlic clove first. After mixture is mixed, add  $\frac{1}{2}$  cup finely chopped pimientos.

## Betty Crocker's Honey Chocolate Cake

Get recipe from Kitchen Tested Sack of Flour.

## Honey Ice Cream

Prof. Tracy's formula, Bulletin 345, Illinois Experiment Station.

## Honey Pumpkin Pie

Page 25, "100 Honey Helpings."

## Honey Helpings

Don't forget the new booklet "100 Honey Helpings." The recipes have been thoroughly tested not only in the Institute kitchen but in the kitchens of many of the food companies and many homes. They are the most proved honey favorites. New combinations in which honey blends with an endless variety of foods are being developed. If you wish more honey recipes or menus for special occasions, ask the Institute to help you but be sure to get a copy of "100 Honey Helpings" from American Honey Institute, Madison, Wisconsin.

## Huge General Mills Campaign for Honey Chocolate Cake

This is the most extensive promotion ever undertaken by General Mills, of any particular feature, not only from the standpoint of the advertising schedule that will announce it to homemakers everywhere, but because it will be merchandised both by members of the General Mills organization and the grocery industry, with unusual and complete display material for grocery store tie-ups.

Betty Crocker's Honey Chocolate Cake is a product of the tested recipe service of the General Mills kitchen under the direction of Betty Crocker and its merchandising represents an expenditure in material and advertising of better than \$250,000 not taking into consideration the cost of handling and merchandising. This information comes from R. L. Brangs, vice-president of Gold Medal Foods, Inc. He says, "This is the most complete program in advertising and merchandising ever devised or attempted by General Mills and is the biggest and most powerful schedule to bring customers direct to grocers in all food advertising history."

Now, beekeepers, take note of this. Get the significance of it. One food company is spending \$250,000 to ad-

vertise a recipe featuring the use of honey. The advertising appeared in the October numbers of the Woman's World and Good Housekeeping and the November numbers of Country Gentleman, Farmer's Wife, Household Magazine, Ladies' Home Journal, McCall's Magazine, Pictorial Review, Successful Farming and Woman's Home Companion with a total circulation of 18,333,600.

In addition to this, it will be featured in the National Retail Grocers' Bulletin and by four outstanding radio programs: (1) Betty Crocker, the oldest daytime network feature in America. Broadcast twice each week. The first mention was made on Wednesday, October 8; (2) Betty and Bob, a five-day a week dramatic show. Mention was made of Honey Chocolate Cake during the week of October first. (3) Hymns of All Churches broadcast daily, five times a week. (4) Gold Medal Minstrels, a five-day a week program, broadcast over stations WLW Cincinnati, WXYZ Detroit, WOR Newark, and WGN Chicago, covering approximately 40,000,000 population.

All these radio programs will be announcing to this audience, not once but several times during the eight weeks' period of this merchandising program, Betty Crocker's Honey Chocolate Cake.

The grocer's broadside completely depicts the plan that will be followed by approximately 500 General Mills' salesmen operating from coast to coast, and from border to border, supplemented by about 2,000 to 3,000 jobbers' salesmen, all simultaneously creating displays in grocery stores and features by grocers, centered around Betty Crocker's Autumn Dinner Menu, and Betty Crocker's Honey Chocolate Cake. One of the most important ingredient items in the program is honey and honey is identified as the important related item and is being given that consideration in the display material supplied for merchandising of the program.

All in all we think this is the most wonderful campaign for honey that has yet appeared anywhere and we certainly want to thank our good friends of General Mills organization for such splendid cooperation. Beekeepers will do well to listen for all the program; look for the Autumn Dinner Menu store wide sale setup and insist that grocers get lined up on the program and insist that the display material provided the stores is used and that your own honey be a part of the general display during the eight weeks period of this campaign. If you wish more advice or information, write American Honey Institute. Don't let this go by without doing something. It is almost as important as Honey Week itself.

(Please turn to page 538)

## A Word About the Honey Producers' League

Those of you who missed the League convention at Detroit were unfortunate, indeed, because I have the feeling that it was the finest national meeting that has been held in the past twenty years. The question frequently arises as to what the League is doing. I think this question was answered at Detroit. Regardless of how many members the League may have, or what support it may get from the beekeepers, it is truly a going concern, and when it is possible to have such a national meeting as was held at Detroit, there is no question about its position as a national enterprise.

The editors of the bee journals will have editorials and stories, and I hope they will include praise that is due not only for the splendid program, but for the attendance, as well. The meeting was completely harmonious and contained the most constructive set of papers yet presented. It would have been worthwhile for anyone connected with the bee industry to have been present.

Probably the most impressive feature was the attendance at the banquet. Professor Kelty said there were 154 paid admissions, and there is no way of telling how many peeked through the keyhole! Personally, I felt very proud of the League at this meeting, and if it is continued with such able management, there should be very large crowds in the future.

I don't know who was responsible for the development of all the details, but President Newton, Secretary Milum, and "Straw Boss" Kelty, otherwise known as "Ike," should all receive a postal card of appreciation from you folks who were there. For the Institute, President Kelty, Mrs. Jensen and Mr. Parks are due congratulations.

If the League was ever entitled to a boost, now is the time, and the appreciation of the beekeepers can be best expressed by sending in \$1.00 for their dues!

H. F. Wilson.

## At Thanksgiving "Say It With Honey"

By C. M. Littelljohn,  
Washington.

Our annual feasts of the harvest season all too often fail to include the jar of honey, honey-cooked and flavored desserts, or other honey products that may be the most glorious climax to the Thanksgiving menu.

End of November is the one time

of the year when everything else is momentarily put aside and the whole nation takes stock of its boons and blessings to give due credit to the splendid harvests. These blessings whose most tangible form is on the Thanksgiving table may well be epitomized in a little jar of honey that is a direct challenge to all the rest of the harvest display upon the festive board—even to King Turkey himself and all his celebrated fixin's.

The bounties of Nature in the New World and russet glories of the Autumn festival have had their praises sung ever since the landing of the Pilgrim Fathers. Poets and patriots have thrilled us for decades anent the joys of Thanksgiving, while generally neglecting the greatest boon to the American table—the jar that stands by constantly to fulfill the dessert touch to any meal that needs a graceful rounding off.

There is abundant cause for Thanksgiving in the pot of honey on the table—a cause for Thanksgiving forsooth not once a year at a certain season, but for every blessed day.

Alert modern merchandisers of honey find there is a more receptive frame of mind for the ready acceptance of honey displayed by the average American housewife at this season. Thanksgiving puts her in a "yes" mood for anything that will enrich her table and please each one of her guests and members of the family centered around her groaning board.

One has really not properly observed Thanksgiving, nor filled the festive table to its utmost, unless a thanksgiving tribute is paid to the bees and their sweet products. Upon the altar of Thanksgiving, the pot of honey may be offered with the gratitude that is its due. For our thankfulness is not complete without honey that makes a meal a treat.

## Three Recipes from Nebraska

### Honey Cookies

These are good all-round cookies which may be cut into fancy shapes and iced. They keep moist and fresh for a long time.

- 1 cup shortening
- 1 cup brown or white sugar
- 1 cup honey
- 1 beaten egg
- Grated rind of 1 lemon
- ½ cup warm water
- 2 teaspoons soda
- 5 to 6 cups flour
- 1 teaspoon salt
- 1 cup chopped nutmeats
- 1 teaspoon cinnamon
- 1 cup finely chopped raisins (part citron may be used)

Cream the shortening and sugar. Add the egg and beat until smooth,

then add the honey and mix. Add grated lemon rind and the warm water in which the soda has been dissolved. Sift a portion of the flour with the salt and cinnamon. A little ginger or nutmeg may also be added. Add enough flour to make a soft dough. Roll thin and cut into desired shapes or make into balls in the palms of the hands and press onto greased cookie sheets. Bake in a moderate oven of 400 degrees.

### Honey-Way Squash

- 1 quart cooked squash
- ½ cup honey
- 1/3 cup orange juice
- Grated orange rind
- 4 tablespoons melted butter

Cut squash into small pieces. Pare and drop into salted boiling water. Cook until tender, then drain. Combine honey, orange juice, melted butter and grated orange rind. Place cooked squash in buttered baking dish and pour this liquid over the squash. Bake in moderate oven, turning pieces occasionally, until nicely candied.

If the family has tired of the usual methods of preparing apples, then dress them up with honey and see how enthusiastically they are received.

### Glazed Apples with Honey Filling

- 4 apples
- ½ cup boiling water
- ½ cup sugar

Wipe apples, remove cores and a portion of the skin and place in a saucepan, peeled side down. Add water, cover closely and steam until tender. Transfer to baking dish, peeled side up, sprinkle with sugar and cook in broiling oven or hot oven until sugar is dissolved, basting with ¼ cup of the liquid in which they were steamed.

Filling: Beat one-half cup cream until stiff and beat in gradually 2 tablespoons of mild flavored honey, one-fourth cup chopped walnuts or other nut meats and a few grains of salt. Serve in the center of baked glazed apples.

Louise Tull.

## Honey in Huge Cooking School

By Benjamin Nielsen,  
Nebraska.

A MOST SUCCESSFUL cooking school under the auspices of the Boston Post, a progressive and leading newspaper of the East, has done its share in drawing the attention of thousands of housewives to honey during National Honey Week.

This huge school was held in Symphony Hall, in Boston, Massachusetts,

AMERICAN BEE JOURNAL



and was conducted by Miss Ruth Chambers, noted culinary authority. Thousands of eager and interested housewives packed the huge auditorium at each of the four interesting sessions. Scores of valuable prizes were awarded fortunate winners—among the prizes—an electric refrigerator, radio, ironer, baskets of food-stuffs and all the dishes prepared at the sessions. Small wonder there were large audiences to which honey was presented!

This splendid free publicity for honey did not end however, with any particular session of the cooking school. An able reporter was sent to the sessions to cover the highlights and the recipes were later published in the Boston Daily Post. This long established newspaper has a circulation of several hundred thousand and goes into several states. So one can easily imagine the number of housewives this added advertising for honey reached. Among this number there very probably were many women who did not attend the school. It also served to again call the attention of those women who did attend and may have failed to copy or secure recipes they desired.

In touching the highlights of the various sessions the reporter had this to say of honey, "Warm honey and maraschino cherries poured over a baked ham, just before removing it from the oven is a hint."

We were particularly pleased to note that it was a meat recipe that was offered to these housewives. In honey cookery, the first things we think of generally, are candies, cakes and cookies. We have so many of these to demonstrate the possibilities of honey. So it is doubly valuable to beekeepers to have a different type of recipe brought to the attention of so many potential honey users through so reliable a source.

The recipe as it appeared in the newspaper is as follows:

#### Whole Baked Ham

Place a well-scrubbed ham in an uncovered pan with the fat side up. Cook until done or until the meat-thermometer registers 160 degrees F. Allow 25 minutes per pound for a ten to twelve pound ham, 30 minutes per pound for half ham, 20 minutes per pound for large ham. About 45 minutes before the ham is done, remove it from the oven and carefully take off the rind. Mark fat into squares with a sharp knife. Rub ham with very fine breadcrumbs. Pour over the entire ham one cup of warm honey mixed with one cup of chopped maraschino cherries. Return to a moderate oven and bake until ham is done and the crust is lightly browned.

Previous versions of this recipe required different procedure in method. And while they invariably produced results to make one remember, more care and time were involved.



#### Southern Federation at Nashville December Second

The annual meeting of the Southern Beekeeping States Federation will meet on Monday, December the 2nd, at the Andrew Jackson Hotel, Nashville, Tennessee. It should be well attended by those interested in beekeeping anywhere in the United States, especially those interested in the sale of live bees and queens and those who buy them.

The discussion of beekeeping problems will be the main thing at this convention. Morley Pettit of Georgetown Ontario, will collaborate with E. G. LeSturgeon of San Antonio, Texas, and George Bohne, of Luling, Louisiana, in getting up one of the best programs we have ever had. Mr. Pettit, because of his position as a beekeeper and educator, will outline a meeting to hold the interest of everyone.

Nashville has been selected as the ideal city for this organization because northern beekeepers can easily reach it and the beekeepers of the Middle West do not have far to go. The beekeepers of the entire South have an equal distance.

There will be a very interesting program and it is hoped that there will be more details to be announced in our November issue. In the meantime, those interested in the furthering of good beekeeping are urged to attend and make this the best meeting in the history of the Southern States Beekeeping Conference. I expect to see hundreds of friends at this meeting.

G. G. Puett, Secretary,  
Southern Beekeeping  
States Federation.

#### The Washington State Beekeepers' Association, Dec. 3-4

The Washington State Beekeepers' Association will hold their 31st annual state convention at Yakima, Washington, Tuesday and Wednesday, December the 3rd and 4th. An interesting program is in the making. Very important business is to come before the convention. Regular members are urged to attend. Beekeepers of Washington are cordially invited. Visitors from neighboring states are welcome to our meeting.

M. F. Mommsen, Secretary.

#### Ontario Convention, Nov. 20-22

The annual convention of the Ontario Beekeepers' Association will be held in Toronto, at the King Edward Hotel, on November 20th, 21st, and 22nd. We wish to extend a hearty invitation to all American beekeepers to attend this convention and take part in the discussions.

E. J. Dyce,  
Secretary-Treasurer.

#### 46th Annual Convention of California Association, Hotel Leamington, Oakland, Calif., Nov. 19-21

This is the 46th convention. Remember an Association can be successful only in proportion to its ability to reach each member and provide an avenue through which the members contribute to the common cause. President Nicolaysen says the coming convention must be a record breaker.

There will be two exhibits; first, an exhibit by producers for which prizes will be offered; second, an exhibit by wholesalers whose aim will be to attract the attention of retailers who visit the exhibits and get ideas for better exhibits in stores—to popularize honey.

Mrs. Krebs is receiving fine cooperation from members of the auxiliary, which is considered an affiliation of the state association. The exhibit at the coming convention will pay any beekeeper to come a long distance to see.

Beekeepers of the five Pacific states have been invited to join in this convention and many have accepted. It will be a big convention.

#### Oregon Association to Meet in Medford, November 15 and 16

Mrs. Malitta F. Jensen, secretary of American Honey Institute will be one of the several visitors from out-of-state at the meeting of the Oregon State Beekeepers' Association at Medford, November 15th to 16th. Numerous California beekeepers, especially from the northern part of the state and several officials of the California association, will also be at the Oregon meeting.

#### Idaho, Nov. 7-8

The Idaho State Beekeepers' Association has tentatively set their convention this year at Boise for Novem-

ber 7 and 8, it is announced by J. A. Redfield, of Idaho Falls, president of the organization. W. H. Wicks, state director of plant industry, who has charge of bee inspections, will probably attend the convention. Mrs. Malitta Fischer Jensen, of the American Honey Institute at Madison, Wisconsin, will be principal speaker at the meeting.

Glen Perrins,  
Utah.

#### The Iowa Convention

The Iowa Beekeepers' Association will hold their annual convention at Ames on November 21-23 in connection with the college short course and the meetings of affiliated societies.

Of special interest will be detailed report by Dr. O. W. Park of the first season's work with disease resistance in the cooperative experiment conducted at Pellett Gardens at Atlantic. As a result of this preliminary investigation Dr. Park has made plans for future work which he will outline to the Iowa beemen.

Dr. Lloyd R. Watson, originator of the method of controlled mating of honeybees has been invited to be present to discuss the breeding problems involved in improvement of the honeybee. It is hoped also that James I. Hambleton, of the U. S. Department of Agriculture, will be present.

Since this is expected to be the most important session of the Iowa organization in many years a good attendance is expected.

#### North Dakota Honey Favors

At the 1935 National Convention of the P. E. O. Sisterhood held at Yellowstone Park each delegate was given a small jar of honey with the following printing on the label. "Greetings to P. E. O. North Dakota is O.K. Bees produce more honey per hive in North Dakota than anywhere else in the U. S. Compliments of the Greater N. Dakota Association."

#### Rocky Mountain Exhibit at Utah Fair

The Rocky Mountain Honey Company, Salt Lake City, operated by Otto Grow, had one of the outstanding exhibits at the big Utah State Fair in Salt Lake City during the first week of October. Handsome displays of glass and tin packs were exhibited by this honey bottler who supplies consumers in and around Salt Lake City. The fair display brought much extra business, Mr. Grow reports.

Glen Perrins,  
Utah.

#### Minnesota Convention, St. Paul, Nov. 4-5

The annual convention of the Minnesota Beekeepers' Association will be held at the Lowry Hotel, St. Paul, Minnesota on November 4th and 5th.

Many new and interesting features have been added to the program including the giving of many valuable prizes, such as (1) 25 pounds comb foundation, (2) 1 dressed turkey, (3) one crate of 50 five-pound honeypails, (4) 2 dressed chickens, two banquet tickets, etc. Many other prizes will be offered and all who attend have an opportunity to draw for the prizes.

M. C. Tanquary, Secretary.

#### Vigo Co. October Meeting

The Vigo County Bee Association met at Terre Haute with eighteen present and five of the Ladies' Auxiliary. A motion picture of Vigo County Apiaries was shown. A wonderful picture of J. E. Starkey enjoying the picnic dinner at the field meet last June and a good one too of Ben Wilkins.

The election of officers resulted in the re-election of W. A. Pogue, Ora Smith, Walter Thomas, Wm. R. Biel-field, T. E. Routledge. National Honey Week plans completed. The ladies served Honey Cake. Had enough to pass around to the Corn and Hog Committee meeting in the same building.

Honey cakes go over big, ever eat any? Try them.

Wm. A. Pogue,  
Indiana.

#### Vigo County Activities

The meeting of the Vigo County Beekeepers' Association was held at the Post Office Building, Terre Haute, Indiana, September 18. There were fourteen beekeepers present and ten members of the Ladies Auxiliary. The principal speaker was Dr. B. H. Smith whose subject was "Beltsville Research Center." Following his talk, there was a discussion relative to the pure food law now awaiting action by the House. A letter from Mrs. Jenkes, our representative, read. Mrs. Jenkes introduced the bill and takes much pains to keep the Association informed as the bill progresses.

The following extension work has been done by the County Association officers: 5 officers report 235 hours, 205 miles traveled, 1 lecture to entomology class Teachers College, 5 to luncheon clubs, 15 to township agricultural classes, 6 to township farm bureau. Forty-five colonies have been treated for American foulbrood, 132 hours spent with state inspectors.

W. A. Pogue,  
Indiana.

#### Meeting of Rock Island County Beekeepers

The Rock Island County Beekeepers' Association held its annual meeting September 5 at the Presbyterian Church, Edgington, Ill., with an attendance of fifty-seven. A fine chick-

en dinner was served by the ladies of the church.

Speakers for the meeting were as follows: Dow Ripley, Taylor Ridge, District Bee Inspector; A. L. Kildow, Putnam, former State Bee Inspector; C. L. Duax, Chicago, State Bee Inspector; Mrs. C. L. Duax.

The following officers for the coming year were elected: Rev. C. K. Dean, Cordova, President; John Kadel, Taylor Ridge, Vice-Pres.; S. F. Peterson, East Moline, Secretary; H. A. Wickersham, East Moline, Treasurer; Fred C. Hofer, Taylor Ridge, Director; Albert Simmons, Milan, Director; Warren Zeigler, Moline, Director.

After the business meeting, Mr. Duax gave a very interesting program.

S. F. Peterson, Secretary,  
Illinois.

#### Illinois Beekeepers Meet August 4

DeKalb and Kane County Beekeepers' Association had a fine picnic and pot luck dinner August. We had another on September 8 at Hopkins Park on Route 23 between Sycamore and DeKalb. An all day affair.

Carl H. Tudor,  
Secretary.

#### Pierce County (Washington) Beekeepers Meet

The Pierce County (Washington) meeting was held at the home of Mr. and Mrs. R. B. Miller at Puyallup, August 10. It was attended by about thirty beekeepers.

A. E. Ternan, County President, reported on joint meeting with the Yakima Valley Beekeepers which was held at Lake Tipsoe on July 27. He said in part: "A very fine program was enjoyed. Picnic lunch was had among the beauties of flowers and snow on the summit of Naches Pass, Mt. Rainier."

Our August tenth meeting in Puyallup touched on matters of interest in one of the finest bee locations in the country. Mr. Wright of Boise, Idaho, gave a short talk on honey production in his district. Mrs. Arthur Green of Graham, Washington, Superintendent of Bees and Honey at the western Washington Fair held in September of each year, gave a talk on honey for advertising at fairs and the methods of showing it to the best advantage. Election of officers saw A. E. Ternan of Ohop returned for a second year as president, Mrs. Cora Peter, vice president, Mrs. E. V. Ryan, secretary-treasurer.

A fine picnic lunch was served in which honey was used for all sweetening purposes and honey recipes were exchanged among the ladies.

Mrs. E. V. Ryan,  
Secretary.



# American Foulbrood and Natural Selection

By Miss A. D. Betts,  
Editor of "The Bee World,"  
England.

CONTRARY to the view expressed by Mr. Kellstrand (p. 386), the writer believes that modern beekeeping methods are far more likely to develop a strain of bees resistant to American foulbrood than were those of the old skeppist.

Consider what happened when American foulbrood invaded an old-fashioned apiary. The beekeeper did not know it was there. He only saw his brood nests in the fall, when cutting out combs from stocks he had put over the sulphur pit, and—unless the aroma was very unpleasant—would most likely notice nothing then, brood combs being merely cut out and thrown aside to be rendered. But his methods were such that they dealt with this disease automatically. He "took up" the very heavy and the too light colonies, leaving the medium ones to survive the winter.

Now the very heavy colonies would include all those which had very good queens, no doubt; and in so far as he destroyed those stocks—good honey-getters and nonswarmers—his methods were bad from the eugenic point of view. He tended to breed from persistent swarmers. But—and this is the point I want to stress—the very heavy stocks included all those which had robbed out a diseased colony and acquired its infected honey stores. The very light stocks, moreover, would include all the diseased colonies not weak enough to have been destroyed by robbers in late summer or early fall, but still too weak to go safely through the winter. By sulphuring them, he destroyed the worst sources of infection which would otherwise have been robbed out during winter or early next spring. There remained only (1) the colonies which had become infected very recently and (2) the colonies which had been robbing diseased stocks but had not (or they would have been sulphured) stored much infected honey. Neither of these would be likely to become seriously diseased until next season was well advanced; so that loss of stocks in summer and wholesale robbing at that season, would be unlikely to occur. Thus the disease may well have been always present, and yet have interfered very little with the honey crop—or not sufficiently for the beekeeper to realize that anything was amiss with his bees. In

"The Feminine Monarchie," Rev. Chas. Butler's famous book, in which he describes the beekeeping of Hampshire three hundred years ago, there are unmistakable hints that American foulbrood was rampant in the district and that Butler himself had it continually in his apiary; yet he believed that bees never had any diseases, and did not suspect that the "stinking stopping" to which he refers was not pollen gone bad, but decayed brood.

In these circumstances, there would be no tendency to produce a strain of bees which were resistant to the disease. True, bees that took it easily would be sulphured next fall; but then so would bees that were highly resistant, and could rob out several diseased colonies with impunity and so acquire a huge store of ill-gotten honey full of spores; and also those which did not take the disease at all because they were not given to robbing, but worked steadily at honey-getting and accumulated a good surplus by their own honest labor. If anything, the system would tend to eliminate the resistant rather than the non-resistant strains.

On the other hand, modern methods—particularly in countries where American foulbrood is promptly burned when found—tend to destroy the non-resistant stocks. Even if we make full allowance for the ignorant or careless beekeeper who does not know foulbrood when he sees it, or neglects to deal with it, we should still have to conclude that resistant stocks would be likely to increase faster than non-resistant ones. They would more often be strong enough to swarm, and so increase in number.

## Dr. Honeybee, M.D.

By Carroll Van Court,  
California.

You may have tried it before, but it is a new one on me. My stove man was repairing our stove, last week, when we happened to start talking about climate and health, and one thing and another.

Then he mentioned that he used to be troubled frequently with hay fever.

"I guess there is no help for that pesky ailment, is there?" said I, re-

membering what so many persons had told me about it.

"I found one," replied my stove man, to my surprise.

"You don't say! And what have you found that would be of any good to a hay fever sufferer?" I asked.

"You'd be surprised," said he. "When I have an attack coming on, I merely take two tablespoonfuls of good honey a day, one at night, and one in the morning. But this honey must come from flowers or plants that are in the same vicinity you caught your hay fever in."

"Sort of fighting fire with fire, as it were, is that what you mean?"

"Exactly. Just as a doctor gives you a serum or vaccine from the same liquid that contains some of the germs of the disease, to make you immune, so I found out that honey made from the same flowers that gave me hay fever caused my hay fever to go away."

And that is how it works—for him, anyway. Why not try it?

## Inscription Found Over the Doorway of a House Unearthed in Pompeii

This little house which has lain beneath an embalming shroud of dust and ashes for some two thousand years is so sweet and neat that there are some who say, with much to support them, that it was the house of a young couple and that it had grown with their love. They had planned it and watched it. They had chosen the plaster and the paint on the walls, and over the doorway had caused to be inscribed these beautiful words: "Lovers, like bees, lead a honeyed life."

W. J. Sheppard,  
British Columbia.

## The Diligent in Ill-Doing

Wasps labour not as bees to stock  
their homes,  
But live the most part on rapine and  
spoils,  
Yet are as diligent and earnest thus  
As bees in their more worthy labours  
are.

And so it is with many in the State,  
Who in unlawfull trades and callings  
take  
As much, nay more, of labour and of  
paines,  
Than some in lawfull avocations do.

—Adapted by W. H. Hull,  
Virginia.

**Dependable Italian Queens**

INSTANT SERVICE

SELECT UNTESTED QUEENS, 50c.

15% discount to dealers.

CALIFORNIA APIARIES

J. E. Wing Cottonwood, California.

**JOSEPH DUSEK**  
COMPANY  
726 WEST RANDOLPH STREET, CHICAGO.

**HONEY**

ALL GRADES  
COMB AND EXTRACTED

Any quantity.

(Reference, First National Bank)

**HIGH GRADE THREE BAND  
ITALIAN BEES AND QUEENS**

free from disease, write or wire for Guaranteed Delivered Prices on what you want.

D. C. JACKSON, Funston, Ga.

**"EAT HONEY" STICKERS**

To paste on your letters, envelopes and packages.

A constant honey advertisement.

White letters on 1/2"x2" red paper  
—"Eat Honey"—Gummed for use.

1000, 40c. 100, 20c. Postpaid.

AMERICAN BEE JOURNAL

Hamilton, Illinois

Booking Orders for  
**PACKAGES FOR 1936**

No increase in price.

J. M. CUTTS &amp; SONS

Route No. 1 Montgomery, Ala.

**BEE SUPPLIES**

We have a complete stock on hand at all times, so we can give you quick service.

**A. H. RUSCH & SON CO.**  
REEDSVILLE, WISCONSIN

**THE GOAT WORLD**

official organ of

The American Milk Goat Record Ass'n.

Oldest and largest Milk Goat magazine published. Broadest circulation. Articles by best authorities. Subscription rate one year \$2.00; three years \$4.00; five years \$6.00.

Sample copy 20c.

Address:

**THE GOAT WORLD**  
Vincennes, Indiana

**THE EDITOR'S ANSWERS**

When stamp is enclosed, the editor will answer questions by mail. Since we have far more questions than we can print in the space available, several months sometimes elapse before answers appear.

**FIVE QUESTIONS FROM ILLINOIS**

1. When is the best time in July or August to cage the queens of colonies run for honey production?
2. When bees are gassed in the fall, what is a good way to clean out the bees that die in the cells?
3. Is it practical to paint queens to make it easy to find them? What kind of paint may be used?
4. If combs are melted to separate honey and wax, does the honey have a waxy flavor? What about the pollen in the combs?
5. Is evergreen bittersweet a tree or vine?

ILLINOIS.

Answers.—1. The best time for us here would be about the first of September. To cage queens in either July or August would be entirely too early.

2. Very few bees die in the cells. Most of them fall to the bottom board and can be easily removed. Those that die in the cells may be gotten out by shaking the comb in an inverted position so the slope of the cells is in the direction of gravity.

3. Yes, it is practical. A spot of paint on the top of the thorax makes them easy to locate and also marks the year of introduction. You immediately know also when queens are superseded. Use Duco enamel; any color.

4. Yes, the honey has a waxy flavor and is sometimes not only discolored by pollen but also by propolis. We do not like melting. Prefer gravity separation.

5. A vine. Two sexes separate. It takes two plants, a male and a female to get berries.

**BEES ON SHARES**

What are the usual terms between two interested persons for keeping bees on shares? TEXAS.

Answer.—(a) You own half, the other man own half and the crop be divided in half, each furnishing his own containers. The man working the bees to receive a wage per hour determined between the two for labor expended on the half he does not own.

(b) One man own the bees entirely, the other man provides labor. He gets so much per hour for labor and 20% of the crop, furnishing his own containers for his share.

(c) One man owns the bees, the other man operates the bees for half the crop with no wage, and furnishes his own containers.

**REQUEENING FOR SWARM PREVENTION**

I have about 150 colonies. I would like to know if requeening would stop swarming next spring? I had considerable swarming last spring. They did not get so much honey. Would like to have your opinion on the question. IOWA.

Answer.—To keep bees from swarming, it is well to have young queens, but they must be reared in the fall, August and September, otherwise you would get still more swarms.

Rear your queens in the fall and destroy the old queens then. You had probably buy a good book on queen rearing and follow its directions. You may then produce better bees than you now have.

**VALUE OF COMBS**

What do you consider good combs are worth built on medium brood wired frame, and combs built straight, strong and free

from disease? These are standard size frames and two years old. IOWA.

Answer.—Combs built straight, of good worker cells, Langstroth size, are variously estimated at 30 to 50 cents each. In a colony of bees, the queen is the most valuable part, then the combs, then the bees, and lastly the hive. Of course, nothing can be done without the bees, but the queen and the combs are still more valuable, for they remain a longer time. The bees change all the time.

**WOMAN COMPARED TO THE BEE**

Will you kindly explain to me the meaning of the following taken from your book "The Honeybee," page 203, number 508?

"The tenth and last species of women were made out of a bee; and happy is the man who gets such a one for his wife. She is full of virtue and prudence and is the best wife Jupiter can bestow."—Spectator, No. 209. ONTARIO.

Answer.—Mr. Langstroth, who was the original author of this book, was a minister and gave a great many exhortations in the columns of the work. A certain number have been retained by us, and this is one of them. It was copied by him from the magazine "The Spectator" of London, and compares the queen to a virtuous wife.

**ORCHARD PLANTING FOR HONEY**

I have twenty-five bee swarms and a two-acre apple orchard, small trees, which I would like to plant with some plants that produce honey. Part of same I would like to plant with poppies; now would you suggest a few other plants that produce lots of honey and wax? WISCONSIN.

Answer.—We don't know anything about poppies for production in Wisconsin. Never heard of them as producing much honey, but they yield pollen in abundance. Perhaps that is what you call "wax" in your letter, but wax is not produced by plants. It is produced by bees and is secreted by them after consumption of large quantities of honey. It takes about ten pounds of honey to produce a pound of comb.

Other plants that you might grow in your orchard are the clovers, rape, mustard, and small fruits like the raspberry. These would probably give you more positive crops of both honey and fruit, than any other plants.

**THE MODIFIED DADANT HIVE**

You will remember I wrote to you last winter asking about the Dadant hive and also asked for prices. I later purchased five of these Modified Dadant hives and also five supers of a local dealer here. Fixed them all up with wired foundation, sent down to Mississippi for package bees and this year, without robbing them, four of the colonies averaged 100 pounds of extracted honey and the fifth colony made me 75 pounds of fine section comb honey. They are now nicely packed outside in leaves and I note that even on these cold days some of them come out for a flight. Of course some of them never get back into the hive as they become chilled and drop into the snow, but most of them go back all right so I believe I shall winter them successfully.

It is a new experience for me and I am wondering if I should not provide more supers for another year. This year they had to draw all the combs out and of course I have now five supers already filled with empty combs and they will not have all that work to do; but should I not get at least



four supers for each colony?

I am pleased to note so many articles showing that people are becoming interested in the larger hive body. Looks to me like good common sense. A manufacturer does everything to speed up production and keep the employees contented so they will not even think of striking. Crowded quarters always make trouble, be it in a factory or a beehive—therefore I predict that with the better breeding of bees and modern methods, the Modified Dadant Hive will come to be the STANDARD equipment. ILLINOIS.

Answer.—You have had a very good season, all things considered. It is quite probable that you will do better next year. With our large hives, it is not necessary to have more than three supers per colony, with perhaps one or two extra. The reason why I wish not to overdo the providing of supers is that, in a bad season, they must be cared for, and we rarely need more than three supers per colony. Some of the colonies may not have enough room, but if some of the others have extra room which they are unable to fill, it is very satisfactory to equalize them, by exchanging empty combs for full combs from one colony to another. In doing this, it is not necessary to shake the bees off, if the crop is on, and it is not necessary to do it unless the crop is on. When bees are making honey, they do not quarrel.

Of course, if you do not mind the extra expense and the extra care of a few supers, you may get enough to have four per colony. But I really believe that bees work with more vim, if they are helped in the way I mention, neither does it annoy a very populous colony to furnish four to five almost full frames of honey to another. The great advantage is that, when you do the extracting you find everything full, and no blanks.

### Save On Your Bee Papers

American Bee Journal, one year, \$1.

Bees and Honey, one year, \$1.

**BOTH TOGETHER, \$1.60**

Send orders to

**AMERICAN BEE JOURNAL**  
Hamilton, Illinois

## A Useful Book

The growth of commercial beekeeping has been responsible for the development of outapiaries. Most men who depend upon their bees now have more than one apiary. There are certain fundamentals to be considered by every commercial beekeeper, and the book

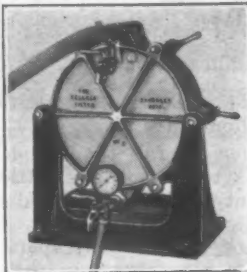
### OUTAPIARIES

By M. G. DADANT

Is very helpful in this field. The author grew up in the beeyard. His father and grandfather before him were commercial honey producers.

Suggestions for choosing a location, selecting apiary sites, system of management, moving the bees, harvesting the crop, as well as equipment and management are included. The book is cloth bound and sells for only one dollar. Second edition revised.

**AMERICAN BEE JOURNAL**  
Hamilton, Illinois



## HONEY FILTERING!

**W**E HAVE designed and built special Cellulo Equipment for filtering honey. Several commercial installations have already produced amazing results in brilliantly clear, stable honey with high sales appeal. The process is comparatively simple and the cost is a profitable investment. It will pay you to investigate this new equipment!

In addition to the new Cellulo Filter we can also supply the necessary mixing tanks, flash heaters, etc.

More than 2,000 Cellulo Filters have been built in the past for filtering vinegar, cider, wine and liquids of all kinds. If you have any kind of filtering job to do, consult us without any obligation.

**THE CELLULO COMPANY**  
1321 FIRST ST. SANDUSKY, OHIO

### STATEMENT OF OWNERSHIP

Statement of the ownership, management, circulation, etc., required by the Act of Congress of August 24, 1912, of American Bee Journal, published monthly at Hamilton, Illinois, for October 1, 1935.

STATE OF ILLINOIS, } ss.  
County of Hancock, }

Before me, a notary public in and for the state and county aforesaid, personally appeared M. G. Dadant, who, having been duly sworn according to law, deposes and says that he is the business manager of the American Bee Journal, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, rendered by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations, printed on the reverse side of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor and business manager are:

Publishers, American Bee Journal, Hamilton, Ill.  
Editor, C. P. Dadant, Hamilton, Ill.  
Managing editor, G. H. Cale, Hamilton, Ill.  
Business manager, M. G. Dadant, Hamilton, Ill.

2. That owners are:  
American Bee Journal, Hamilton, Ill., owned by

C. P. Dadant, Hamilton, Ill.  
H. C. Dadant, Hamilton, Ill.  
V. M. Dadant, Hamilton, Ill.  
G. S. Dadant, Hamilton, Ill.  
L. C. Dadant, Hamilton, Ill.  
M. G. Dadant, Hamilton, Ill.  
Louisa G. Saugier, Hamilton, Ill.  
Joseph Saugier, Hamilton, Ill.

That the known bondholders, mortgagees and other security holders owning or holding one per cent or more of the total amount of bonds, mortgages or other securities are: None.

(Signed) M. G. DADANT,  
Business Manager American Bee Journal.  
Sworn to and subscribed before me this twenty-third day of September, 1935.

MINNIE KING,  
Notary Public.  
My commission expires Nov. 18, 1937.

### Better Bred Italian Queens

Try our improved three-banded stock, any quantity 50¢ each. Dealers, 42¢ each.

Foundations and bee supplies at good prices. Write for prices.

**CALVERT APIARIES, Calvert, Ala.**

### SELLING HELPS for Your Honey

Beekeepers are learning to sell honey locally, thus avoiding the glutted central markets. Our honey folders are ideal in this respect, and for distribution at roadside stands.

#### Honey Leaflet



Four pages. Cover in four colors. Explains fully but briefly the value of honey, its uses, and gives a few recipes. Name and address of beekeeper with honey prices if desired. Fits ordinary envelope. Sample free.

Prices postpaid with name and address, etc.:

100, \$1.85; 250, \$2.75  
500, \$4.75; 1000, \$7.75  
Each additional 1000, \$9.75.

#### Eight Page Honey Folder

"Sweetheart of the Flowers"  
Short description of what honey is, how produced, harvested. How to keep it, and other data of general interest. A full page of honey recipes included.

#### Prices

100---\$1.00 250---\$2.50  
500---4.50 1000---8.50  
Extra for printing your name and address: 250 or less, 95¢; 500, \$1.25; 1,000, \$1.90.

American Bee Journal :: Hamilton, Illinois

## Don't Forget!

When you are packaging this year's crop be sure that the container and its label are attractive. To assure yourself of a ready market, consult our Catalogs of Containers and True Character Labels. If you do not have them, ask for your copy now.

American Bee Journal . Hamilton, Ill.

**HONEY GATE FOR 60-LB. CANS**



Screw it on your can of honey and you are ready to fill your small containers. Well made, Nickel-plated. For 2 1/4, 2 1/2 and 3-inch openings. State size wanted. Only 88 cents plus postage. Weight 1 pound. If you are not delighted with the gate, return it and your money will be refunded. Keep this ad. Ernest Fahlbeck, Mfr., 406 Springfield Av., Rockford, Ill.

**Package Bees FOR 1936**

Write for Prices  
**The Crowville Apiaries**  
ROUTE 1 WINNSBORO, LA.

**Orders-Inquiries**



Can be Secured by MAIL

**POLK'S REFERENCE BOOK and Mailing List Catalog**

Gives counts and prices on over 8,000 different lines of business. No matter what your business, in this book you will find the number of your prospective customers listed. Valuable information is also given as to how you can use the mails to secure orders and inquiries for your products or services.

Write for Your FREE Copy  
**R. L. POLK & CO., Detroit, Mich.**  
Largest City Directory Publishers in the World  
Mailing List Compilers—Business Statistics  
Producers of Direct Mail Advertising

How to Install Package Bees Successfully.

### Facts About Bees and Queens

Get your free copy of this catalog of information. Burleson's Free Booklet will help you with many of your problems. Write to

**THOMAS C. BURLESON**  
Box 450 Colusa, California.

**PIGEONS**

If you are interested in Pigeons, you need the **AMERICAN PIGEON JOURNAL**, an informational, instructive 86-page monthly magazine. Sample 15c; 12 months \$1; three years \$2.

**AMERICAN PIGEON JOURNAL**  
Dept. B Warrenton, Mo.

**SWARMING—ITS CONTROL AND PREVENTION** by L. E. Snelgrove, M.A., M.Sc. Including new and easy methods of prevention—involving little labor, no caging of queen or destruction of cells—no interruption of laying or honey-gathering, immediate occupation of supers, annual requeening, increase or not as desired. Postpaid, \$1.00.

**SNELGROVE, Bleadon, Somerset, England**

Are Your Friends Subscribers to America's Oldest Bee Journal?

## Lives of Famous Beekeepers

(Continued from page 522)

he was glad when he got back to the one-story Long Idea hives.

The following fall the Poppletons moved back to Florida and settled in Dade County, where he decided to take up migratory beekeeping. Since the dawn of history beekeepers had moved their bees about on the Nile river in Egypt. But it required great skill to handle bees in this manner, and to make them pay their keep; and American beekeepers had failed in their attempts. But Poppleton succeeded. He moved his bees, following the season for the best flow of nectar, placing them on the banks of the St. Lucie River, where they stayed from October to June, then moved them with a barge up the river 150 miles to Hawks Park for the rest of the year. Hawks Park had the best groves of black mangrove trees in the state. By getting two crops of honey each year he was able to boast in four years of yields of 273, 291, 82 and 300 pounds average per colony.

He tried different methods of propelling the barge, first by sailboat, then with a steam tug. Before 1900 he purchased his gas launch, "Thelma." He was the first beekeeper in America to use such a boat in connection with an apiary. In 1895 the mangrove froze so badly that he had to seek a new summer location. Up and down the river there were a variety of plants which came into bloom at different seasons. When conditions were unfavorable in one place he could seek pasture elsewhere, producing large crops of honey from palmetto and other plants. He also had a small patch of pineapple at his home in Dade County. It produced from 25 to 100 barrels of fruit annually.

Mrs. Poppleton died about 1900, and apparently he lived alone for several years. One of the daughters had married and settled seventy miles from Dade County. The other, still single, cared for an aged grandfather in Iowa.

In 1903 Poppleton left for a pleasure trip among the Florida Keys on his launch. "We will live on our boat, going from place to place as the notion takes us; we will visit both the coral and the sponge reefs while gone," he wrote.

Poppleton, said A. I. Root, made a very thorough study of every phase of the beekeeping industry. One of his chief contributions was the invention of the solar wax extractor. When his bees were afflicted with paralysis, at a time when other beekeepers were writing that paralysis was incurable, he proved conclusively that it could be cured, and was the

first to recommend the use of powdered sulfur for this purpose. Later he found disease resistant bees. He lost 15,000 pounds of honey and a number of colonies of bees before he worked out the cure.

Although he kept bees almost until his death, his name was infrequently mentioned in the magazines in his later years. He died in the National Soldiers' Sanitarium at Hot Springs, South Dakota, in October, 1917, after he had gone in failing health to visit his daughter in Iowa that summer.

## American Honey Institute News Notes

(Continued from page 531)

### Mrs. Jensen's Western Trip

The following schedule has been arranged for your Institute secretary, Mrs. Jensen, for her western trip: Oct. 25-26, Springfield, Illinois; Oct. 31-Nov. 1, Wyoming; Nov. 4-5, Salt Lake City, Utah; Nov. 7, Idaho Falls, Idaho (demonstration); Nov. 8, Idaho Falls, Idaho (state meeting); Nov. 9, Boise, Idaho (demonstration); Nov. 11, Baker, Oregon; Nov. 12, Umatilla, Oregon; Nov. 13, Portland, Oregon; Nov. 14, Corvallis, Oregon; Nov. 15, Medford, Oregon; Nov. 19, 20, 21, Oakland, California; Nov. 23, Fresno, California; Nov. 25-28, San Diego, California; Nov. 29, Pomona, California; Dec. 2-3, Tennessee; (not decided) Montana.

### National Honey Week, Nov. 10-16

Three of us at the American Honey Institute office are kept busy filling orders, writing broadcasts, getting recipes sent off to homemakers, demonstrations, suggestions to cooking school specialists, outline of features, working at top speed. You will find further details of plans for National Honey Week on pages 514 and 539. Do your part.

One point to make in regard to National Honey Week is that much of the cooperation may now be classed as routine such as honey displays, honey promotion, and of course we want National Honey Week to be routine so there will be honey promotion in effect as routine in other parts of the year.

Because beekeepers have made one successful attempt to tie in to the general National Honey Week program in their own localities in other years, don't let down the bars and do any less than has been done before. Be sure to do your part. All the little efforts put forth in all the little localities all over the United States are what will make National Honey Week a success.



## Cerinthos as Bee Plants

By C. M. Wood,  
Michigan.

A small group of plants of south-eastern Europe and Asia Minor, known to botanists as *Cerithe*, seems to possess much merit for bee pasture. Even the name of the genus points to that fact for we are told that it comes from two Greek words, meaning wax and flower, the same scholar telling us "the ancients thought that the bees visited the flowers for wax." And the ancients were more often right in their observations than we give them credit. In any event, all three species that have been in my garden are favorite haunts of bees, and those discriminating little creatures do not hang around a plant out of curiosity.

Two species, *Cerithe aspera* and *Cerithe retorta*, that I have had are annuals and the other, *Cerithe alpina*, though it is said to be perennial, acts as biennial here. They are all of garden merit, with their large showy leaves, usually spotted yellowish white and shades of red and long tubular flowers (cream and yellow in the first named; yellow, tipped purple and in a purple bracket, in the second; yellow and brown in the last).

Owing to their garden value, ease of culture, and possible use as plants for bee pasture, they deserve more consideration than they have ever had in America. As to culture, I broadcast the seeds in early spring, raking them into the soil. Plants should stand eight inches apart and have full exposure to the sun. Any light, well-drained soil suits them and they are not exacting as to moisture.

## Good Arrangement

Instead of putting hives in a row as is customary in many apiaries, four hives should be placed in a square formation with their backs to a common center.

Young bees with hives so placed do not drift readily because they can easily recognize their own home. This plan cuts down the chance of the spread of disease. It requires more labor and perhaps more material for winter packing but where foul-brood is common, every weapon available must be used against it.

Frederick Garman,  
Pennsylvania.

## Aluminum Paint

Someone asked about aluminum paint for tanks and containers. Say, it works fine. First clean and sand-paper the surface of the metal before applying the paint. I use it, too, to paint beehives. Geo. Gordon,  
Florida.

## Wanted White Extracted Honey

Send Sample and best price Frt. Paid to Cincinnati, O.

**THE FRED. W. MUTH CO.**

## AMERICAN HONEY INSTITUTE IS

# Your PROPERTY

□ □

*Are you DEVELOPING it?*

*Is it SERVING you?*

*If not, WHY not?*

□ □

Do you know that:

1. A QUARTER OF A MILLION DOLLARS is being spent by Gold Medal Foods, Inc., to advertise and merchandise Betty Crocker's HONEY CHOCOLATE CAKE?
2. Posters and Honey Recipe Leaflets for use during NATIONAL HONEY WEEK are being furnished free by KELLOGG'S, Battle Creek, Michigan?
3. "100 Honey Helpings" is selling honey? Producers and Packers have ordered 15,000 copies. Sample copies, 10c.
4. Home Service Directors throughout the country will feature honey demonstrations during National Honey Week?
5. National Honey Week suggestions may be used throughout the year?
6. A copy of the Honor Roll is included in every set of honey recipes sent to homemakers and specialists?

Further details from

## AMERICAN HONEY INSTITUTE

MADISON, WISCONSIN

## WRITE FOR FREE BOOK

On the Great Northwest. Thousands of acres of sweet clover and other honey plants that give honey of high yield and fine quality. Favorable localities—Red River Valley, in Minnesota and North Dakota; Milk River Valley; Lower Yellowstone Valley; Valier Project; Kootenay Valley, in Montana and Idaho; and the Pacific Coast Region, in Oregon and Washington.

Beekeepers in this country are increasing their holdings and new beekeepers are establishing themselves along the Great Northern Railway in these states. Diversified farming and live stock are similarly favored by low cost production.

Write for Free Booklet on beekeeping and farming opportunities, including Low Homeseekers' Round Trip Excursion Rates.

**E. C. LEEDY**

DEPT. J, GREAT NORTHERN RAILWAY

ST. PAUL, MINNESOTA

# Crop and Market Report

Compiled by M. G. Dadant.

For our Crop and Market for the November number, we asked reporters to answer the following questions:

1. How will the total 1935 crop compare to 1934?
2. How will it compare to normal?
3. How is honey selling retail?
4. What price offered by buyers by car, white? Comb?
5. How much of the honey in your locality is out of the hands of the producer?

## Crop Compared to 1934

There is not much change since our report in the October number. Some sections have had a shorter crop than earlier anticipated and some have had added to their total a nice fall crop. The fall crop is reported chiefly from the Central West and extending out into the plains territory of Kansas and Nebraska through Indiana. New Jersey also has reported a very fair fall crop as well as some of the south Atlantic seaboard states.

On the other hand, the crop was a disappointment in the intermountain territory where sweet clover did not yield as late as usual. This was particularly noticeable also in the north plains section of North Dakota and Minnesota. Minnesota particularly had their sweet clover crop cut off short with far below the anticipated total. All in all, we believe that the total crop will not be much different than we had anticipated a year ago.

## How Will It Compare to Normal?

Nothing like a normal crop this year we believe. In fact practically no states are reporting normal conditions. The exception would perhaps be a northern Atlantic coast region. Michigan likely approaches somewhere near normal. New Mexico and Arizona are also perhaps above normal in some sections and likely near normal together.

However, our idea would be that the percentage of a normal crop this year would be about 60 to 75 per cent. The shortage is caused, of course, in the great white clover regions which had practically nothing this year except where there were areas in sweet clover and the addition of the fall crop. The shortage also has been caused somewhat by the lack of later honeys in the west plains and intermountain territory. This extends into Utah, Nevada and Idaho.

## How Is Honey Selling?

Practically all reports were to the effect that honey in a retail way is selling normally. **The large amount of fruit does not seem to have had much effect on the demand for honey.** This is likely due to the fact that we have had subnormal conditions for demand the past four to five years and the increase in honey publicity likely has made an increased demand for honey which has counter-balanced the possibility of shortage of demand through a heavy fruit crop.

## Buyers and Prices

Buyers are still active in the market, particularly in California where the prices are considerably lower yet than in most other sections of the country. They are also active in the intermountain and northern plains section but in these sections, most of the honey has already been disposed of.

In the West, we learn of buyers purchasing honey in as great a quantity as carlots at 7 cents per pound and the price gradually drops with the western movement

owing, of course, to the higher freight rate. In central western territory, we find honey being offered at a price around 6 cents per pound. In California, amber honey is still as low as 3½ cents per pound f.o.b. shipping point and white ranging from 5 to 5½ cents.

We are appending again this month our suggestions on honey prices, crops, etc., for the information of our subscribers.

## Honey Disposed Of

Somewhat surprised to learn of the large amount of the 1935 crop which is already disposed of. This is particularly true of the producer who sells in large quantities in bulk and does not count on distributing to any retail customers. In such instances in many cases, practically all of the honey has been disposed of. This is particularly true in the northern plains sections comprising the states of Dakotas and Minnesota, as well as in Michigan. Here practically all of the bulk honey has been disposed of. In the intermountain territory, the demand is still good and honey has either been fairly well cleaned up in a large way or else it is being held for much better figures. We also find the tendency in California to hold for better prices than are yet being offered.

All in all, we doubt whether the buyers have yet sufficient honey to carry them through and likely, there will have to be a little stimulus in the price in order to get additional quantities sufficient to carry on. It is in many quarters a question whether the honey production this year is going to be sufficient to carry through until the following crop. A big campaign like that of the Gold Medal people advertising Honey Chocolate Cake is undoubtedly going to make an additional demand for honey which will have no little bearing on the disposition of the crop.

## Summary

We believe that the honey crop is pretty well disposed of except what is being held in private hands for retail sale and that which is still held in the hands of producers in large quantities is in rather firm hands, anticipating a desirable price before its disposition. We have no doubt but that the crop will move readily at present prices at least before the 1936 crop comes in.

There were some peculiar angles to the crop this year. For instance, the Black Hills of South Dakota had a very short crop whereas last year they did not suffer with the rest of the state. North Florida has been very short whereas southern Florida has had perhaps above normal. Maine has had an extremely poor crop although the rest of the New England states are satisfied. The western slope of Colorado is probably normal or above whereas the eastern slope is short. We see again the effect of condition of alternating weather and supply of water.

It may not be amiss to say that it is to be hoped that practically all of the present crop is disposed of before 1936 honey begins to come in because from present prospects there should be a great crop in 1936. The white clover region abounds in honey plants, the sweet clover regions are favorable and there has been sufficient moisture almost everywhere to place plants in a satisfactory condition. In addition, bees apparently are going into winter quarters in very satisfactory fashion throughout the country.

## Are You Ready for This Season?

Have you gone over your equipment? Have you plenty supplies? Advertisers in the American Bee Journal will welcome any inquiry sent to them.

FRAMES: Standard Hoffman \$29.50 per 1000. Other supplies. Price list free.  
NORTHERN BEE & HONEY CO.  
Osceola, Wisconsin

**Edwin H. Guertin** 201 N. Wells St.  
Chicago  
Buy and Sell All Grades Extracted Honey  
References: 1st National Bank, R. G. Dun or  
Bradstreet's Commercial Reports.





# **The BEEKEEPER'S EXCHANGE**

Copy for this department must reach us not later than the fifteenth of each month preceding date of issue. If intended for classified department it should be so stated when advertisement is sent.

Rates of advertising in this classified department are seven cents per word, including name and address. Minimum ad, ten words.

As a measure of precaution to our readers, we require references of all new advertisers. To save time, please send the name of your bank and other references with your copy.

Advertisers offering used equipment or bees on combs must guarantee them free from disease, or state exact condition, or furnish certificate of inspection from authorized inspector. Conditions should be stated to insure that buyer is fully informed.

## **BEEES AND QUEENS**

**ITALIAN Queens.** Northern bred, for Northern conditions.  
Eugene Gordon, Hershey, Nebraska.

**CAUCASIAN BEES AND QUEENS** booked up for 1935 but accepting orders for 1936 delivery. Bolling Bee Co., Bolling, Ala.

**MOUNTAIN GRAY Caucasian bees** and queens for 1936 delivery at Code prices. P. B. Skinner Bee Co., Greenville, Alabama.

## **HONEY FOR SALE**

**FOR SALE**—Northern white extracted and comb honey.  
M. W. Cousineau, Moorhead, Minn.

**CHOICE Michigan Clover Honey.** New 60's.  
David Running, Fillon, Michigan.

**HONEY FOR SALE**—Any kind, any quantity. The John G. Paton Company, 230 Park Avenue, New York.

**FOR SALE**—Well ripened clover honey, car lot or local shipments. Will be pleased to submit sample. **THE COLORADO HONEY PRODUCERS' ASSN.**, 1424 Market St., Denver, Colorado.

**HONEY FOR SALE**—Keep your customers supplied with honey. We can furnish white and light amber honey at attractive prices. Packed in 60-lb., 10-lb. or 5-lb. tins. Dadant & Sons, Hamilton, Ill.

**NEW CROP CLOVER HONEY.** Write for quotation before buying.  
Edward Klein, Gurnee, Illinois.

**FOR SALE**—Comb and extracted honey.  
H. G. Quirin, Bellevue, Ohio.

**CHOICE WHITE CLOVER HONEY** in 60-pound cans. J. F. Moore, Tiffin, Ohio.

**NEW COMB AND EXTRACTED.**  
N. B. Querin & Son, Bellevue, Ohio.

**FINEST QUALITY white clover honey.** \$8 per case, 120 lbs. net. New cans. Sample 10c. W. J. Manley, Sandusky, Michigan.

**HONEY**—Comb-Extracted. Select lots. Write us your needs. Sample on request. A. I. Root Co., 230 W. Huron St., Chicago, Ill.

**1800 LBS. OF BUCKWHEAT HONEY** 6c lb. Sample 15c.  
F. W. Summerfield, Grand Rapids, Ohio.

**FANCY CLOVER** and fall honey.  
Kalona Honey Co., Kalona, Iowa.

**EXTRACTED HONEY**, light and amber. Write for price.  
Henry Price, Elizabeth, Illinois.

**FOR SALE**—Extracted honey in 60-lb. cans.  
Henry Hettel, Marine, Ill.

**20,000 POUNDS** extracted amber honey at 6½c; light amber 6¼. New cans and cases. Valley View Apiaries, Savanna, Illinois.

**FOR CHOICE AMBER** extracted honey address Henry Stewart, Prophetstown, Ill.

## **HONEY AND BEESWAX WANTED**

**WANTED**—Light and amber honey.  
Riverside Apiaries, Russell, Illinois.

**WANTED**—Extracted Honey. Send sample and price delivered to T. W. Burleson & Son, Waxahachie, Texas.

**WANTED**—HONEY and BEESWAX. Beekeepers will find it to their advantage to communicate with us. Please send samples, state quantity available and prices. **CALIFORNIA HONEY COMPANY**, Hamilton & Company, Agents, 108 W. Sixth Street, Los Angeles, California.

**WANTED**—Car lots honey; also beeswax, any quantity. Mail samples, state quantity and price. Bryant & Cookinham, Inc., Los Angeles, Calif.

**WANTED**—Comb and extracted honey, in carlots or less. Send sample with delivered price. Schultz Honey Co., Ripon, Wisconsin.

**WANTED**—Honey, all grades. Amber and capping melter honey our specialty.  
Blue Ribbon Honey Co., Gurnee, Illinois.

**WANTED CARLOTS OR LESS.** Clover extracted honey. New cans. Clover Blossom Honey Co., 712 Kossuth St., Columbus, Ohio.

**WANTED HONEY FOR CASH**—Truck lots and carloads—good Illinois, Indiana, Michigan, Ohio, Wisconsin, Minnesota, Dakota and Western honey. We are large cash buyers—write us.  
W. F. Straub & Company, Chicago, Ill.

**SPOT CASH PAID FOR COMB AND EXTRACTED HONEY.** Send samples and best price.  
C. W. Aeppler Company, Oconomowoc, Wis.

## **WANTED**

**WANTED TO BUY** bees in northern California or southern Oregon.  
N. Heins, Albany, Oregon.

**YOUNG MAN**, 22, experienced with bees and honey wants work. Reliable, good worker. Anywhere.  
Grant Riddle, Lakeville, Indiana.

**WANTED**—Sorghum, honey, maple syrup. Any quantity.  
Heaven City Apiaries, Mukwonago, Wis.

## **FOR SALE**

**STRAW BEEHIVES** for roadside honey selling stands; English and landscape gardens; estates. Photos on request.  
G. Korn, Berrien Springs, Mich.

**FOR SALE** at a bargain or will trade for honey, 200 10-frame supers in excellent condition. Many have never been on the hives. Write for particulars.  
Jay Smith, Route 4, Vincennes, Indiana.

## **SUPPLIES**

**BEST QUALITY** bee supplies, attractive prices, prompt shipment. Illustrated catalog on request. We take beeswax in trade for bee supplies. The Colorado Honey Producers' Association, Denver, Colo.

**PORTER BEE ESCAPES** save honey, money, avoid stings; faster most efficient. Sample 15c. R. & E. C. Porter, Lewistown, Ill.

**SAVE QUEENS.** Safin cages now 15c. Ten for \$1.00.  
Allen Latham, Norwichtown, Connecticut.

**DIFFERENT**, that's all. Written and published for the instruction of beekeepers. 52 pages of breezy entertaining beekeeping comment each month. One year, \$1.00; two years, \$1.50. Sample, 3c stamp.  
The Beekeepers Item, San Antonio, Texas.

**WILL WORK YOUR WAX** into plain medium brood foundation for 15 cents pound.  
Fred Peterson, Alden, Iowa.

**FOR SALE**—Queen mailing cages. Material, workmanship and service all guaranteed. Write for quantity prices.  
Hamilton Bee Supply Co., Almont, Mich.

## **DAIRY GOATS**

**DAIRY GOAT JOURNAL**, Dept. 32, Fairbury, Nebr. Monthly magazine. 25c yearly; 5 months 10c.

## **MISCELLANEOUS**

**BOOK BARGAIN**—Very slightly damaged copies of *Beekeeping in the South* by Kenneth Hawkins, cloth bound, published to sell at \$1.25, price postpaid only 29 cents.  
American Bee Journal, Hamilton, Ill.

**PLANS FOR POULTRY HOUSES**—All styles; 150 illustrations. Tells you the type to build for your particular locality. Secret of getting winter eggs, and copy of "Inland." Send 25c.  
Inland Poultry Journal, Spencer, Indiana.

**FOR SALE**—We are constantly accumulating bee supplies, slightly shopworn; odd sized, surpluses, etc., which we desire to dispose of and on which we can quote you bargain prices. Write for complete list of our bargain material. We can save you money on items you may desire from it. Dadant & Sons, Hamilton, Illinois.

**THE BEE WORLD**—The leading bee journal in Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy, post free, 12 cents stamps. Membership of the Club, including subscription to the paper, 10/6. The Apis Club, Brockhill, London Road, Camberley, Surrey, England.

## **Another Idea for Treating American Foulbrood**

In the Journal for October, 1934, is an article from Harmon Bosch asking about using the acid screen for driving down bees in transferring cases of American foulbrood. The answer states that it might eliminate the second treatment.

Now we have had experience in transferring several hundred colonies. We never have used the acid treatment and we never treat the second time. We have found a quicker way and it has never miscarried. We use nine sheets of foundation and place one empty drawn comb in the center position at the time we shake or brush the bees. The next day we carefully remove this frame and insert the missing frame of foundation. In the meantime, the bees will have deposited any honey they may have loaded during the shaking.

This has simplified our system of treatment a great deal and has given us practically 100 per cent results. Of course we burn this frame as well as the ones we shake from. Many times a perfectly empty comb can be found in a diseased colony and we have not hesitated to use this for the bait comb. We have been able to find no bad results.

Harold I. Perrin,  
Nebraska.



## Method of Cleaning Extractors

I want to give the method of a beekeeping friend of mine for taking care of rust inside an extractor. First take off the rust with sandpaper, Sapolio or any cleaner. Then, when perfectly dry and clean, paint with aluminum paint. He says that one of his extractors treated in this way five years ago is as bright and fresh today as when he painted it.

I have taken his advice and have painted both bottom and sides. They are like burnished silver. It's great stuff!

Henry Bedinger,  
California.

## "Cities of Wax"

"Cities of Wax" by Julie Closson Kenly (D. Appleton-Century, \$2.50) divulges the mysteries of the organization of the beehive in a manner designed to appeal to children. Some of the chapter headings show the trend of the subject matter: "Bee Babies," "Where the Bees Go to Market," "The Awful Fate of Lazybones," "Mysteries," etc. The length of the book appears somewhat disproportionate to the subject and its treatment; for it runs to some two hundred-odd pages which for a child's book on a natural science, when as informally dealt with as it is here, is somewhat long to warrant one's presupposing a great popularity for it, at least among the children themselves.

Chapters of the book read at random will no doubt appeal to the very young whose interest in natural history usually amounts to catching a few lightning bugs and listening to bedtime stories. The maturer child with whom natural history is a hobby will, without knowing why, find the sort of talking down which Mrs. Kenly does in "Cities of Wax" more or less annoying and will turn to the older essayists such as Samuel Scoville and Dallas Lore Sharpe to satisfy his intellectual curiosity and his feeling for a more dignified approach to his interests.

One might hazard that perhaps Mrs. Kenly is more familiar with her audience than with her subject, although there are fewer misconceptions and evasions than one might expect in a piece of writing of this sort.

## Airlines for Queen Bees

A clipping from a newspaper sent us by John R. Hancock, of Dallas, Texas, reports shipments of queen bees by airplane between Carolina and California. C. G. Ellison, the shipper, praises the service. Why not?



*The New* HAZEL-ATLAS  
SKYLINE HONEY JARS

A modern honey jar that combines an up-to-the-minute sales-boosting design with the practical considerations that appeal to the packer; big, smooth label space, wide mouths, heavy bases. Capacities from left to right: one-half pound, one pound, two pound, three pound, and four pound. Write for prices and free sample.

HAZEL-ATLAS GLASS CO.  
WHEELING, W. VA.

Choose  
Labels  
Wisely

You Can't Go Wrong  
With A-B-J LABELS

They sell honey and  
are priced right.

Send for Complete Catalog.

AMERICAN BEE JOURNAL  
HAMILTON, ILLINOIS

## SUPPLIES You'll Need

### YOUR BEST BUY TODAY

They produce gentler bees  
and are 20-40% more prolific.

Ultra Violet Ray Treated (Patent U. S. 1868042  
Queen Bees 85c each. July 19, 1932)  
10 or more 80c each.

**MILL RUN Medium Brood Foundation** (95% perfect sheets) 8x16% - 8 9/16x16%  
100 lb. lots 40c lb. 10 lb. lots 42c lb.

**SECONDS Medium Brood Foundation** (every sheet will please) 8x16% - 8 9/16x16%  
100 lb. lots 36c lb. 10 lb. lots 37c lb.

### HONEY PAILS AND CANS

50 - 5 lb. Pails \$3.15

50 - 10 lb. Pails \$4.65

60 lb. Cans (bulk) less than 50 - 32c each.

60 lb. Cans (bulk) more than 50 - 30c each.

Individual cartons for 1 - 60 lb. can 10c each.

### CELLOPHANE WRAPPERS FOR COMB HONEY (3 colors)

4 1/4 x 4 1/4 x 1 1/2

100 at \$ .85

4 1/4 x 4 1/4 x 1 1/2

500 at \$3.95

4x5x1 1/2

1000 at \$7.80

### Plain Cellophane Wrappers (no printing)

100 at \$ .50

500 at \$2.50

1000 at \$4.90

### MODERNISTIC JARS (very attractive)

Quart packed 1 doz. to case with screw caps - 85c per case.

16-oz. packed 2 doz. to case with screw caps - 85c per case.

8-oz. packed 2 doz. to case with screw caps - 67c per case.

Send for our beautiful label catalog.

We will accept honey and beeswax in trade for bee supplies. Write us.

Ship your comb to us for rendering.

**THE FRED W. MUTH COMPANY**

PEARL & WALNUT STS.

CINCINNATI, OHIO.

## ATTRACTIVE NEW LABELS

-- for --

**Sunburst Jars      Beehive Jars**

These fit exactly into the label spaces on either kind of jar. Write  
for samples to see how well they look and for prices.

AMERICAN BEE JOURNAL -- HAMILTON, ILL.

## A Valuable Magazine

**\$1.00**

### PER YEAR

2 Years, \$1.50; 3 Years, \$2.00.

Foreign—

1 Year, \$1.25; 2 Years, \$2.00; 3 Years, \$2.75.

WRITE FOR SAMPLE COPY

"Gleanings in Bee Culture is so thoroughly  
practical and valuable from not only a produc-  
tion standpoint but also in sales promotion ideas,  
that we wish to have the numbers bound for  
quick reference."—A. F. D., Ohio.

PUBLISHED BY

**THE A. I. ROOT CO.**

Box G-2 Medina, Ohio, U. S. A.

Gleanings in Bee Culture—1 Year } **\$1.60**  
American Bee Journal—1 Year } In U. S. A.



## Jensen's "Magnolia State" Italian Queens

Still available at 50c each. Requeening late, after all brood  
has emerged, is regular practice with some commercial bee-  
keepers and is a success. Don't let a single colony go into  
winter queenless or with a queen of doubtful calibre. Orders  
filled immediately. Quality guaranteed to equal our usual  
standard.

**JENSEN'S APIARIES, Macon, Mississippi**

## Wanted Shipments of Old Combs for rendering into Wax.

WRITE FOR FULL PARTICULARS  
**THE FRED. W. MUTH CO.**  
PEARL & WALNUT CINCINNATI, O.

Write us for your 1936  
**PACKAGE BEE AND QUEEN**  
Requirement  
**GARON BEE CO., Donaldsonville, La.**

**EXTRA LARGE PAPER SHELL**  
**PECANS**  
Write for Prices.  
**JASPER KNIGHT, Hayneville, Ala.**

**AMERICAN RABBIT JOURNAL**  
Shows the way to success... gives the  
latest news and views of the rabbit world  
—an illustrated monthly magazine of  
general and educational features. Yearly  
\$1.00. Three years, \$2.00. Sample 15c.  
**AMERICAN RABBIT JOURNAL**  
Dept. S. Warrenton, Mo.

**PACKAGE BEES, NUCLEI, QUEENS**  
FOR 1936 DELIVERY  
— Circular Free —

**"ST. ROMAIN'S HONEY GIRL" APIARIES**  
Hamburg, Louisiana

**QUEENS**   
**THAT SATISFY**  
One — A Hundred — A Thousand —  
They're all alike — Good Italians  
Trade agreement Prices.  
**VICTOR APIARIES, KYLE, TEX.**

**"The  
Romance of the Hive"**  
By Frank C. Pellett

A new book by this well known  
author. A thoroughly enjoyable ro-  
mance — delightful reading — about  
your favorite pursuit. A philosophi-  
cal story of the facts of bee life.  
Many fine illustrations. Large read-  
able type. Cloth binding, 203 pages.

Price \$2.00, postpaid.

**AMERICAN BEE JOURNAL**  
Hamilton, Illinois



## PACKAGE BEES QUEENS for 1936

Let us quote you.

Citronelle Bee Co., Citronelle, Ala.

### THE BEEKEEPERS ITEM

The Southern beekeeper's own magazine, but read by honey-producers everywhere. Combined with the American Bee Journal makes a combination that covers the beekeeping field.

Send \$1.60 and get both magazines for a full year.

BEEKEEPERS ITEM, San Antonio, Tex.

### THRIFTY BEES

Guaranteed to please. Combless packages & Queens

Let us quote you our 1936 prices

W. J. Forehand & Sons  
Fort Deposit, Alabama  
Breeders Since 1892

### WHO WILL GET YOUR

1936 BEE and QUEEN orders, Try MERRILL'S service and stock, you will be pleased.

### MERRILL BEE COMPANY

Mississippi's Oldest Shippers

BUCATUNNA, :: :: MISSISSIPPI

## True Label Characters



Designs that compel attention.  
Colors that blend and please.  
Wording that makes a sale.

Our labels and selling  
helps meet these requirements  
at reasonable prices.

Send for Catalog  
and Samples.

American Bee Journal  
Hamilton, Illinois

Mention American Bee Journal  
when writing advertisers.



WALTER T. KELLEY

## WAX SUPPLIES

Worked into comb foundation—cash or trade basis—High cell wall—true base angle—toughest sheet known

We manufacture a complete line of soft white pine supplies, etc. Better buy now as lumber is advancing, we will save you money.

### WALTER T. KELLEY CO.

Office and Factory

PADUCAH, KENTUCKY

## Package Bees & Queens YORK'S Quality Bred Italians



WHAT are your requirements for 1936? Let us book your order now for any quantity for delivery in spring when wanted. Same prices from now to June 1st, 1936.

Young Laying Queens, 75c ea. any number. Tested Queens, \$1.50 ea. any number. 2-lb. packages bees with queens, \$2.45 ea. any number. 3-lb. packages bees with queens, \$3.15 ea. any number. 15% discount to recognized dealers only.

We are prepared to handle any size order satisfactory. We use light cages, give over-weights, guarantee live delivery and complete satisfaction.

York Bee Company, Jesup, Georgia  
(The Home of Quality Products)

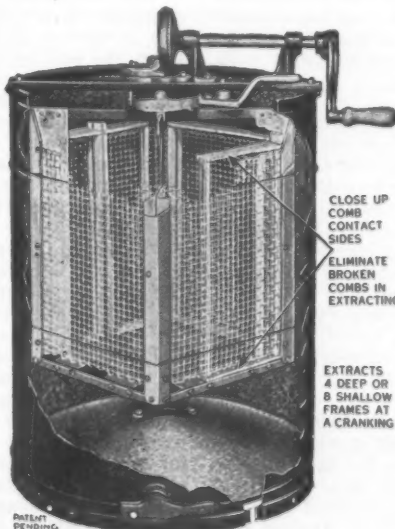
Dealers for Lewis Beeware & Dadant Found. at Cat. Prices

## Bind Your Copies for Reference

New style binder, opens flat, will hold twelve issues of American Bee Journal, price postpaid \$1.25.

AMERICAN BEE JOURNAL

HAMILTON, ILL.



## The Universal Honey Extractor

Takes 4 deep frames of any size up to 11 1/4" or 8 shallow frames of any size up to 6 1/4" at a loading or cranking.

It has the greatest capacity in the smallest space and the least weight, capacity considered, which makes for easy cranking, yet it is the most substantial.

It will extract more honey and do it easier than any hand power extractor on the market. The next step is to the power driven Radials.

Ten different styles and sizes of extractors to choose from, all priced as to value and performance

### A. G. Woodman Company

GRAND RAPIDS, MICH., U. S. A.

## The POSTSCRIPT

GOSSIP ABOUT THE OFFICE IN THE MAKING OF THE MAGAZINE

Probably my most appreciative correspondent is my five-year-old grandson, Franklin. He insists that when he grows up he will be a "Honeydad." It would be interesting to know just what kind of mental picture the child mind has of the business of a honeydad.

When the asters bloomed around the experimental apiary in late September they were visited by large numbers of big flies but no honeybees. It is strange to note that when plants usually regarded as important sources of nectar are visited by these flies the bees seem to avoid them. This was generally reported as the case with sweet clover in western Iowa last summer. There seems to be no satisfactory explanation of the failure of the bees to hold their own in competition with the flies except that the flies take so much of the nectar as to leave nothing worth-while. It would seem that the bees might be as efficient and get it first, leaving none for the flies.

It would be interesting to know how the idea became prevalent that the Italians are worse at robbing than other races. When the honeyflow stopped in September the bees very soon began looking about for opportunities to rob. With three races in one apiary it appeared to me that there were a dozen dark bees snooping about to one yellow one. As well as I was able to judge the Caucasians were more persistent than either Carniolans or Italians, although one could not always distinguish with certainty between the two dark races.

Mention has been made here of the coral vine which came from Florida and refused to prosper for me. One planted in a big pot at Hamilton by Miss Swigelson of our staff has grown freely and bloomed abundantly in October. Here is evidence that the vine can be grown in the North if given proper conditions. Since this vine is regarded as one of the finest sources of nectar known to the southland it should be commonly planted by beekeepers who live in mild climates.

Whatever degree of success may attend the cooperative experiment in disease control, much of the credit will be due to the wise supervision of Dr. C. J. Drake, head of the Department of Entomology of Iowa State College. Dr. Drake has pointed out important objectives which might otherwise have been overlooked. It is an unusual arrangement whereby the Iowa Agricultural Experiment Station, the Extension Department of the College and the American Bee Journal work together for a common end. While it is too early to judge final results, enough encouragement is offered from the first season's work to arouse the enthusiasm of all the workers who await with impatience the coming of another spring.

J. J. Wilder answers the question in the October postscript as to why sourwood fails to secrete nectar, by saying that it is determined by the growth of the tree in the previous year. He contends that if there is a heavy twig growth with an abundance of green leaves the tree will yield well the next season. If on the other hand, the growth is light with imperfect foliage there will be no sourwood honey during the following season. Wilder says that the weather at the time of blooming has but little to do with the nectar yield. He has had opportunity for wide observation of the honey plants of the South. We will be interested to hear whether others support his contentions.

The announcement of the death of John Prothero reminds me of a very pleasant visit with that genial gentleman at his home among the Virginia hills. He told an entertaining story of his first meeting with Mrs. Prothero when she was trying to start a car which refused to run, during an active bombardment at the front during the late war. The acquaintance which began under such strange circumstances ripened into romance and led to

the beautiful Virginia home which the beekeepers so loved to visit.

The wedding of Robert Dadant, son of M. G. Dadant, who was a mere toddler when I first became associated with the American Bee Journal, is another reminder that the years are rapidly passing. His sister, Mary Elizabeth Ross, has recently presented her proud parents with a second grandson.

Likewise my daughter Ruth has a new boy which brings the number of my grandchildren up to five. As we grow older we transfer much of our ambition to our children and look forward to seeing them do all the big things which we expected to do when we were young and full of enthusiasm. Thus we welcome the newcomers in the fond hope that they will realize all of our dreams.

Reports of bees working on *Lespedeza sericea* give hope that as this plant becomes established in the farm rotation it may prove of value to the bees. However, there is nothing to indicate that it will prove to be the equal in nectar secretion of alsike, white Dutch clover or sweet clover. So much of the honey comes from the farm crops that the beekeeper has a vital interest in the legumes which his neighbor uses for forage.

The blue flowered sweet clover of which samples were widely distributed last spring, appears to have been a general disappointment to our readers who have tried it. It had better be called, "Balsam" clover, perhaps since it is not generally classified as a *Melilotus*. Most correspondents reporting state that it turned yellow and lost its leaves in midsummer when it should have been most prosperous. Perhaps it suffered from lack of suitable inoculation. Most legumes require the presence of the peculiar bacteria on which they depend for the fixation of nitrogen. Alfalfa very generally failed with the first trials from this cause. Once proper inoculation was provided alfalfa has succeeded well in localities where it was first pronounced a failure.

Friends far and near are congratulating the senior editor, C. P. Dadant and wife on their sixtieth wedding anniversary which is November 1st. Twenty years of close association with them has been a wonderful privilege on my part. They have seven, children, eleven grandchildren and four great-grandchildren.

The November Country Gentleman has an article which explains the poisoning of livestock on western ranges by the presence of Selenium, a mineral which is absorbed from the soil by the plants. Investigation has shown that where Selenium is present in sufficient quantity it is taken up by many different plants under favorable conditions. Maurice Dadant suggests that this may account for some of the poisoning of honeybees in that region. It appears that some of the plants which are under suspicion for poisoning the bees are the ones which are known to be highly charged with Selenium.

"Sweeten Your Meals With Honey" is the title of one of the best circulars yet issued by that enterprising firm, the Kellogg Company, Battle Creek, Michigan. Beekeepers will do well to write for copies.

Every beekeeper who is interested in a new approach to the problem of disease control will find it to his advantage to attend the Iowa Beekeepers' convention at Ames, November 21 to 23. Prof. Paddock is building a program devoted especially to this subject. John M. Bixler will tell of his many years' effort and Dr. O. W. Park will give a detailed report of the cooperative experiment for the first season. Dr. Watson is coming from New York to talk on breeding to secure desired traits in the honeybee. It promises to be a memorable occasion.

FRANK C. PELLETT.